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<213> Homo sapiens

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<211> 3084

<212> DNA

<213> Homo. sapiens

<400> 157

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<212> DNA

<213> Homo sapiens

<400> 158

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 1994

<212> DNA

<213> Homo sapiens

<400> 186

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<211> 2109

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 3686

<212> DNA

<213> Homo sapiens

<400> 190

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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 5325

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<211> 3313

<212> DNA

<213> Homo sapiens

<400> 240

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<212> DNA

<213> Homo sapiens

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<211> 3850

<212> DNA

<213> Homo sapiens

<400> 242

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<211> 2917

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 3133

<212> DNA

<213> Homo sapiens

<400> 247

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<213> Homo sapiens

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<211> 3558

<212> DNA

<213> Homo sapiens

<400> 254

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<212> DNA

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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1847

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2987

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<212> DNA

<213> Homo sapiens

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<212> DNA

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<213> Homo sapiens

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<213> Homo sapiens

<400> 306

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<213> Homo sapiens

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Gln Pro Met Leu Phe Gln Glu Ala Thr Ala Phe Glu Asn Met Thr Lys
          35             40             45
Asp Trp Asn Tyr Leu Glu Gly Ser Gln Lys Asp Cys Tyr Arg Asp Thr
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Met Leu Asp Ser Tyr Glu Asn Thr Val Pro Gln Gly Ser Phe Leu Gln
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Lys Tyr Asp Val Ile Ser Val Gln Gly Thr Glu Lys Leu Ile Glu Ala
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245 250 255
Lys Asp Ile Asp Ser Thr Cys Gln Val Glu Ile Leu Asp Met Gln Ser
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Ser Ala Asp Gly Glu Phe Lys Phe Ile Leu Tyr Tyr Gln Asp His Ser
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<213> Homo sapiens

<400> 308

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 Gly Leu Gly Pro Ala Leu Pro Pro Pro Pro Pro Tyr Val Ile Leu Glu
 65 70 75 80
 Glu Gly Gly Ile Arg Ala Tyr Phe Thr Leu Gly Ala Glu Cys Pro Gly
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 Trp Asp Ser Thr Ile Glu Ser Gly Tyr Gly Glu Ala Pro Pro Pro Thr
 100 105 110
 Glu Ser Leu Glu Ala Leu Pro Thr Pro Glu Ala Ser Gly Gly Ser Leu
 115 120 125
 Glu Ile Asp Phe Gln Val Val Gln Ser Ser Ser Phe Gly Gly Glu Gly
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 Asp Pro Lys Ser Lys Glu Glu Ala Ile Ile Ile Val Glu Asp Glu Asp
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Lys Arg Lys Phe Ile	Gln Met Arg Arg Pro	Phe Leu Glu Arg Arg Asp	
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Leu Ile Ile Gln His	Ile Pro Gly Phe Trp	Val Lys Ala Leu His Ser	
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Gly Ser Glu Gly Arg	His Val Leu Gly	Ser Glu Gly Arg	Gly Cys Ser
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Gly Ser Glu Gly Cys	Gln Cys Pro Gly	Ser Glu Gly Arg	Arg Val Leu
50	55	60	
Arg Phe Glu Gly Trp	His Val Leu Gly	Ser Glu Gly Gln	Arg Val Pro
65	70	75	80
Gly Ser Glu Gly Arg	Pro Leu Gly Pro	Leu Gly Leu Leu	Arg Glu Gly
85	90	95	

Leu Pro Asp Pro Trp Leu Glu His Arg Pro Arg Gly Asp Pro Ser Pro

100

105

110

Ser Gly Ala Leu Pro Arg Pro Pro Ser Leu Ser Phe Leu Thr Trp Phe

115

120

125

Leu Pro Arg Ser Pro Cys Ile Leu Thr Pro Gly Gly Gly Pro Thr Ser

130

135

140

Asn Ser Leu Ser Pro Ala Gly Ala Trp Ala Gly Pro Arg Ser Leu Leu

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Pro Gln Leu Ala Phe Arg Gly Glu Thr Lys Ala Gln Gly Leu Phe Trp

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Glu Val Gly Ile

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<210> 310

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<212> PRT

<213> Homo sapiens

<400> 310

Met Arg Gly Ser Arg Met Ser Gln Pro Pro Gln Cys Leu Arg Arg Ala

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15

Gln Ser Ser Cys Cys His Phe Met Val Lys Leu Leu Asp Asp Gly Thr

20

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30

Phe Met Ile Pro Gly Glu Lys Val Ala His Thr Ser Leu Asp Ala Leu

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40

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Pro Phe Ala Pro Gly Tyr Cys

290

295

<210> 311

<211> 594

<212> PRT

<213> Homo sapiens

<400> 311

Met Lys Val Thr Leu Ser Ala Leu Asp Thr Ser Glu Ser Ser Phe Thr

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Pro Leu Val Val Ile Glu Leu Ala Gln Asp Val Lys Glu Glu Thr Lys

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Glu Trp Leu Lys Asn Arg Ile Ile Ala Lys Lys Lys Asp Gly Asp Asn

35

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Asn Asp Asp Phe Leu Thr Met Ala Glu Cys Gln Phe Ile Ile Lys His

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55

60

Glu Leu Glu Asn Leu Arg Ala Lys Asp Glu Lys Met Ile Pro Gly Tyr

65

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80

Pro Gln Ala Lys Leu Tyr Pro Gly Lys Ser Leu Leu Arg Arg Leu Leu

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105

110

Leu Lys Lys Leu Glu Asp Thr Trp Tyr Thr Arg Phe Ala Leu Lys Tyr

115

120

125

Gln Pro Ile Asp Ser Ile Arg Gly Tyr Phe Gly Glu Thr Ile Ala Leu

130

135

140

Tyr Phe Gly Phe Leu Glu Tyr Phe Thr Phe Ala Leu Ile Pro Met Ala

145 150 155 160
Val Ile Gly Leu Pro Tyr Tyr Leu Phe Val Trp Glu Asp Tyr Asp Lys
 165 170 175
Tyr Val Ile Phe Ala Ser Phe Asn Leu Ile Trp Ser Thr Val Ile Leu
 180 185 190
Glu Leu Trp Lys Arg Gly Cys Ala Asn Met Thr Tyr Arg Trp Gly Thr
 195 200 205
Leu Leu Met Lys Arg Lys Phe Glu Glu Pro Arg Pro Gly Phe His Gly
 210 215 220
Val Leu Gly Ile Asn Ser Ile Thr Gly Lys Glu Glu Pro Leu Tyr Pro
225 230 235 240
Ser Tyr Lys Arg Gln Leu Arg Ile Tyr Leu Val Ser Leu Pro Phe Val
 245 250 255
Cys Leu Cys Leu Tyr Phe Ser Leu Tyr Val Met Met Ile Tyr Phe Asp
 260 265 270
Met Glu Val Trp Ala Leu Gly Leu His Glu Asn Ser Gly Ser Glu Trp
 275 280 285
Thr Ser Val Leu Leu Tyr Val Pro Ser Ile Ile Tyr Ala Ile Val Ile
 290 295 300
Glu Ile Met Asn Arg Leu Tyr Arg Tyr Ala Ala Glu Phe Leu Thr Ser
305 310 315 320
Trp Glu Asn His Arg Leu Glu Ser Ala Tyr Gln Asn His Leu Ile Leu
 325 330 335
Lys Val Leu Val Phe Asn Phe Leu Asn Cys Phe Ala Ser Leu Phe Tyr
 340 345 350
Ile Ala Phe Val Leu Lys Asp Met Lys Leu Leu Arg Gln Ser Leu Ala
 355 360 365
Thr Leu Leu Ile Thr Ser Gln Ile Leu Asn Gln Ile Met Glu Ser Phe
 370 375 380

Leu Pro Tyr Trp Leu Gln Arg Lys His Gly Val Gln Val Lys Arg Lys
385 390 395 400
Val Gln Ala Leu Lys Ala Asp Ile Asp Ala Thr Leu Tyr Glu Gln Val
405 410 415
Ile Leu Glu Lys Glu Met Gly Thr Tyr Leu Gly Thr Phe Asp Asp Tyr
420 425 430
Leu Glu Leu Phe Leu Gln Phe Gly Tyr Val Ser Leu Phe Ser Cys Val
435 440 445
Tyr Pro Leu Ala Ala Ala Phe Ala Val Leu Asn Asn Phe Thr Glu Val
450 455 460
Asn Ser Asp Ala Leu Lys Met Cys Arg Val Phe Lys Arg Pro Phe Ser
465 470 475 480
Glu Pro Ser Ala Asn Ile Gly Val Trp Gln Leu Ala Phe Glu Thr Met
485 490 495
Ser Val Ile Ser Val Val Thr Asn Cys Ala Leu Ile Gly Met Ser Pro
500 505 510
Gln Val Asn Ala Val Phe Pro Glu Ser Lys Ala Asp Leu Ile Leu Ile
515 520 525
Val Val Ala Val Glu His Ala Leu Leu Ala Leu Lys Phe Ile Leu Ala
530 535 540
Phe Ala Ile Pro Asp Lys Pro Arg His Ile Gln Met Lys Leu Ala Arg
545 550 555 560
Leu Glu Phe Glu Ser Leu Glu Ala Leu Lys Gln Gln Gln Met Lys Leu
565 570 575
Val Thr Glu Asn Leu Lys Glu Glu Pro Met Glu Ser Gly Lys Glu Lys
580 585 590
Ala Thr

<210> 312

<211> 120

<212> PRT

<213> Homo sapiens

<400> 312

Met Phe Leu Ala Pro Leu Leu His Ser Leu Val Leu Pro Gly Leu Phe

1 5 10 15

Leu Ala Pro Pro Leu His Ser Ala Val Leu Pro Gly Met Phe Leu Ala

20 25 30

Pro Pro Leu His Ser Pro Val Leu Pro Gly Met Phe Leu Ala Pro Pro

35 40 45

Leu His Ser Pro Val Leu Ile Ser His Phe Ser Lys Val Gly Phe Arg

50 55 60

Gly Arg Arg Asp Glu Arg Lys Asp Thr Ala Ser His Gly Gly Tyr Gly

65 70 75 80

Ser His Leu Val Met Gly Leu Ser Gly Cys Asp Lys Tyr Thr Lys Pro

85 90 95

His Phe Phe Ser Trp Gly Ala Phe Gly Glu Leu Leu Trp Arg Pro Ser

100 105 110

His Arg Met Leu Glu Asp Gly Phe

115 120

<210> 313

<211> 461

<212> PRT

<213> Homo sapiens

<400> 313

Met Glu Arg Glu Gly Ile Trp His Ser Thr Leu Gly Glu Thr Trp Glu

1 5 10 15

Pro Asn Asn Trp Leu Glu Gly Gln Gln Asp Ser His Leu Ser Gln Val

20 25 30

Gly Val Thr His Lys Glu Thr Phe Thr Glu Met Arg Val Cys Gly Gly

35 40 45

Asn Glu Phe Glu Arg Cys Ser Ser Gln Asp Ser Ile Leu Asp Thr Gln

50 55 60

Gln Ser Ile Pro Met Val Lys Arg Pro His Asn Cys Asn Ser His Gly

65 70 75 80

Glu Asp Ala Thr Gln Asn Ser Glu Leu Ile Lys Thr Gln Arg Met Phe

85 90 95

Val Gly Lys Lys Ile Tyr Glu Cys Asn Gln Cys Ser Lys Thr Phe Ser

100 105 110

Gln Ser Ser Ser Leu Leu Lys His Gln Arg Ile His Thr Gly Glu Lys

115 120 125

Pro Tyr Lys Cys Asn Val Cys Gly Lys His Phe Ile Glu Arg Ser Ser

130 135 140

Leu Thr Val His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys

145 150 155 160

Asn Glu Cys Gly Lys Ala Phe Ser Gln Ser Met Asn Leu Thr Val His

165 170 175

Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Gln Cys Lys Glu Cys Gly

180 185 190

Lys Ala Phe His Lys Asn Ser Ser Leu Ile Gln His Glu Arg Ile His

195 200 205

Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Thr

210	215	220	
Gln Ser Met Asn Leu Thr Val His Gln Arg Thr His Thr Gly Glu Lys			
225	230	235	240
Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln Ser Met His			
245	250	255	
Leu Ile Val His Gln Arg Ser His Thr Gly Glu Lys Pro Tyr Glu Cys			
260	265	270	
Ser Gln Cys Gly Lys Ala Phe Ser Lys Ser Ser Thr Leu Thr Leu His			
275	280	285	
Gln Arg Asn His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Lys Cys Gly			
290	295	300	
Lys Ser Phe Ser Gln Ser Thr Tyr Leu Ile Glu His Gln Arg Leu His			
305	310	315	320
Ser Gly Val Lys Pro Phe Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser			
325	330	335	
Lys Asn Ser Ser Leu Thr Gln His Arg Arg Ile His Thr Gly Glu Lys			
340	345	350	
Pro Tyr Glu Cys Met Val Cys Gly Lys His Phe Thr Gly Arg Ser Ser			
355	360	365	
Leu Thr Val His Gln Val Ile His Thr Gly Glu Lys Pro Tyr Glu Cys			
370	375	380	
Asn Glu Cys Gly Lys Ala Phe Ser Gln Ser Ala Tyr Leu Ile Glu His			
385	390	395	400
Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Asp Gln Cys Gly			
405	410	415	
Lys Ala Phe Ile Lys Asn Ser Ser Leu Thr Val His Gln Arg Thr His			
420	425	430	
Thr Gly Glu Lys Pro Tyr Gln Cys Asn Glu Cys Gly Lys Ala Phe Ser			
435	440	445	

Arg Ser Thr Asn Leu Thr Arg His Gln Arg Thr His Thr
 450 455 460

<210> 314

<211> 122

<212> PRT

<213> Homo sapiens

<400> 314

Met Thr Ile Ala Thr Pro Phe Val Cys Leu Ile Phe Ala His Ser Gln
 1 5 10 15
 Val Phe Thr Asp Phe Ile Pro Tyr Ser Arg His Leu Gln Met Pro Thr
 20 25 30
 Ser Tyr Pro Cys Ser Lys Thr His Phe Lys Cys Pro Leu Leu Trp Glu
 35 40 45
 Met Pro Val Val Pro Leu Asp Thr Asn His Leu Ser Ser Leu Glu Pro
 50 55 60
 Ile Thr His Ala Pro Thr Pro Ile Ser Asn Ala Tyr Ser Ser Arg Lys
 65 70 75 80
 Cys Pro Ser Thr His Gly Gln Lys Ser Ser Leu Leu Leu Thr Ala Asn
 85 90 95
 Thr Ala Ala His Gln Ala Trp Ala Leu Ser His Val Leu Ser Ile Thr
 100 105 110
 Leu Thr Asp Leu Trp Pro Ile Tyr Pro His
 115 120

<210> 315

<211> 123

<212> PRT

<213> Homo sapiens

<400> 315

Met Lys Gly Pro Cys Pro His Leu Pro Pro Pro Leu Ser Ser Cys Ile

1 5 10 15

Met Asn Glu Thr Ala Ala Ser Leu Leu Pro Glu Val Leu His Phe Arg

20 25 30

Leu Gly Cys Asn Gly Ser Ile Ser Ala Gln Cys Asn Leu Cys Phe Pro

35 40 45

Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln Ala Ala Val Asn Thr

50 55 60

Gly Trp Ser Ala Val Val Leu Cys Leu Glu Phe Val Pro Ala Val Gly

65 70 75 80

Phe Val Val Leu Leu Thr Ser Arg Met Lys Pro Arg Thr Phe Thr Arg

85 90 95

Asn Ile Thr Leu Tyr Gly Cys Thr Thr Val Cys Leu Ser Ile Leu Gln

100 105 110

Val Lys Asp Met Trp Val Val Pro Ser Ala Gly

115 120

<210> 316

<211> 127

<212> PRT

<213> Homo sapiens

<400> 316

Met Asp Leu His His Ser Val Gln Pro Glu Ser Leu Leu Leu Ser Thr
 1 5 10 15
 Ala Ser Phe Ser Phe Ser Leu Ile Ile Pro Phe Asn Ser Asn Lys Met
 20 25 30
 Thr Trp Pro Ala His Glu Asn Thr Glu Met Arg Pro His Leu Val Ile
 35 40 45
 Ser Gly Val Leu Arg Gly Thr Leu Val Val Val Leu Gly Ala Ala Val
 50 55 60
 Leu Ser Val Lys Asn Phe Gln Glu Phe Leu Ile Ser Cys Phe His Gln
 65 70 75 80
 Asp Ser His Asn Leu Leu Leu Leu Pro Leu Ser Ser Gly Phe Val Pro
 85 90 95
 Glu His Ile Ile Arg Lys Ala Ala Ile Ile Thr Ala Tyr Leu Pro Pro
 100 105 110
 Ala Pro Leu His Lys His Pro Pro Ser Pro His Cys Ala Lys Gln
 115 120 125

<210> 317

<211> 194

<212> PRT

<213> Homo sapiens

<400> 317

Met Asp Arg Pro Ser Leu Val Arg Ser Arg Lys Gln Ser Pro Arg Leu
 1 5 10 15
 Ser Ala Ser Ser Gly Asn Phe Ile Pro Pro Tyr His Pro Ser Ser Leu
 20 25 30
 Gly Lys Val Glu Arg Thr Asn Gly Leu Leu Lys Thr His Leu Thr Lys

35 40 45
Leu Ser Leu Gln Leu Lys Lys Asp Trp Thr Ala Leu Leu Pro Phe Ala
50 55 60
Leu Leu Arg Ile Arg Ala Tyr Pro Gln Glu Ala Thr Gly Tyr Ser Pro
65 70 75 80
Phe Glu Leu Ser Tyr Gly Cys Thr Phe Leu Leu Gly Pro Asn Leu Leu
85 90 95
Thr Asp Asn Thr Tyr Ala Asp Met Gln Gln Lys Lys Gln Leu Val Phe
100 105 110
Pro His Leu Ser Leu Thr Ala Ser Phe Leu Pro Ser His Leu Ser Leu
115 120 125
Pro Pro Ile Leu Pro Leu Lys Leu Leu Pro Ile Asn Pro Phe Leu Leu
130 135 140
Met Lys Leu Leu Pro Ile Asn Pro Phe Leu Leu Lys Ala Asn Gly Ser
145 150 155 160
Trp Ile Lys Glu Asn Ser Ser Phe Leu Pro His Arg Leu Ile Leu Ser
165 170 175
Tyr His Pro Phe Arg Thr Ser Phe Met Trp Val Thr Ser Gln Trp Pro
180 185 190
Ile Ser

<210> 318

<211> 237

<212> PRT

<213> Homo sapiens

<400> 318

Met Ser Cys Arg His Ser Phe Pro Leu Leu Leu Pro Cys Ser Leu His
 1 5 10 15
 Ser His Ala Phe Leu Ser Ser Cys His Gly Asp Leu Cys Pro Leu Thr
 20 25 30
 Ser His Thr Ala Cys Phe Leu Ala Cys Val Pro Pro Gln Ala Gly Gly
 35 40 45
 His Phe Gln Ser Ser Phe Thr Pro Cys Val Arg Val Ile Asn Gln Ile
 50 55 60
 Trp Ala Pro Val Leu His Pro Leu Cys His Asn Ser Pro Cys Pro Pro
 65 70 75 80
 Asn Leu Pro Gly Thr Arg Phe Gly Ala Met Leu Asp Met Leu Thr Asp
 85 90 95
 Arg Cys Ser Thr Met Cys Leu Leu Val Asn Leu Ala Leu Leu Tyr Pro
 100 105 110
 Gly Ala Thr Leu Phe Phe Gln Ile Ser Met Ser Leu Asp Val Ala Ser
 115 120 125
 His Trp Leu His Leu His Ser Ser Val Val Arg Gly Ser Glu Ser His
 130 135 140
 Lys Met Ile Asp Leu Ser Gly Asn Pro Val Leu Arg Ile Tyr Tyr Thr
 145 150 155 160
 Ser Arg Pro Ala Leu Phe Thr Leu Cys Ala Gly Asn Glu Leu Phe Tyr
 165 170 175
 Cys Leu Leu Tyr Leu Phe His Phe Ser Glu Gly Pro Leu Val Gly Ser
 180 185 190
 Val Gly Leu Phe Arg Met Gly Leu Trp Val Thr Ala Pro Ile Ala Leu
 195 200 205
 Leu Lys Ser Leu Ile Ser Val Ile His Leu Ile Thr Ala Ala Arg Asn
 210 215 220
 Met Ala Ala Leu Asp Ala Ala Asp Arg Ala Lys Lys Lys

225

230

235

<210> 319

<211> 111

<212> PRT

<213> Homo sapiens

<400> 319

Met Gln Gln Thr Phe Leu Asp Asp Ser Pro His Pro Pro Ser Cys Gln

1

5

10

15

Ala Ser Ala Pro Leu His Phe Ser Phe Ser Glu Trp Ser Leu Arg Arg

20

25

30

Leu Pro Asp Leu Leu Leu Pro Gly Pro Ser Gln Ala Tyr Pro Phe Leu

35

40

45

Ser Ser Leu Pro Ser Phe Thr Pro Ser Leu Ser Met Glu Pro His Ser

50

55

60

Gly Gln Asp His Leu Leu Trp Pro Ser Glu Gly Phe Arg Thr Ala Gly

65

70

75

80

Gly Cys Ser Pro Arg Pro Leu Glu Trp Phe Val Ile Phe Leu Cys Leu

85

90

95

Val Pro Thr Cys Leu Ser Ser Leu Leu Pro Pro His Ala Ser Ser

100

105

110

<210> 320

<211> 132

<212> PRT

<213> Homo sapiens

<400> 320

Met Asn Glu Lys Lys Lys Met Leu Lys Val Ala Arg Glu Lys Gly Gln
 1 5 10 15
 Val Thr Tyr Lys Gly Lys Pro Ile Arg Leu Met Val Gly Leu Leu Ala
 20 25 30
 Asp Thr Leu Gln Ala Ile Arg Asp Leu Gly Pro Met Phe Asn Ile Ser
 35 40 45
 Phe Leu Phe Phe Ser Phe Leu Phe Phe Phe Leu Asp Arg Val Ser Leu
 50 55 60
 Cys His Gln Ala Gly Val Gln Trp His Asp Leu Gly Ser Leu Gln Pro
 65 70 75 80
 Pro Pro Pro Arg Phe Lys Gln Phe Ser Cys Leu Ser Leu Pro Ser Ser
 85 90 95
 Trp Asp Tyr Arg Arg Ala Pro Ser His Leu Ala Asn Phe Cys Ile Phe
 100 105 110
 Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Ser Pro
 115 120 125
 Asp Phe Met Ile
 130

<210> 321

<211> 665

<212> PRT

<213> Homo sapiens

<400> 321

Met Met Lys Thr Phe Phe Ser Thr Gly Gln Gly Asp Thr Glu Ala Phe

1	5	10	15
His Thr Gly Thr Leu Gln Arg Gln Ala Ser His His Ile Gly Asp Phe			
20	25	30	
Cys Phe Gln Lys Ile Glu Lys Asp Ile His Gly Phe Gln Phe Gln Trp			
35	40	45	
Lys Glu Asp Glu Thr Asn Asp His Ala Ala Pro Met Thr Glu Ile Lys			
50	55	60	
Glu Leu Thr Gly Ser Thr Gly Gln His Asp Gln Arg His Ala Gly Asn			
65	70	75	80
Lys His Ile Lys Asp Gln Leu Gly Leu Ser Phe His Ser His Leu Pro			
85	90	95	
Glu Leu His Ile Phe Gln Pro Glu Gly Lys Ile Gly Asn Gln Val Glu			
100	105	110	
Lys Ser Ile Asn Asn Ala Ser Ser Val Ser Thr Ser Gln Arg Ile Cys			
115	120	125	
Cys Arg Pro Lys Thr His Ile Ser Asn Lys Tyr Gly Asn Asn Ser Leu			
130	135	140	
His Ser Ser Leu Leu Thr Gln Lys Arg Asn Val His Met Arg Glu Lys			
145	150	155	160
Ser Phe Gln Cys Ile Glu Ser Gly Lys Ser Phe Asn Cys Ser Ser Leu			
165	170	175	
Leu Lys Lys His Gln Ile Thr His Leu Glu Glu Lys Gln Cys Lys Cys			
180	185	190	
Asp Val Tyr Gly Lys Val Phe Asn Gln Lys Arg Tyr Leu Ala Cys His			
195	200	205	
Arg Arg Ser His Ile Asp Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly			
210	215	220	
Lys Ile Phe Gly His Asn Thr Ser Leu Phe Leu His Lys Ala Leu His			
225	230	235	240

Thr Ala Asp Lys Pro Tyr Glu Cys Glu Glu Cys Asp Lys Val Phe Ser
245 250 255
Arg Lys Ser His Leu Glu Thr His Lys Ile Ile Tyr Thr Gly Gly Lys
260 265 270
Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Thr Cys Asn Ser Tyr
275 280 285
Leu Ala Lys His Thr Ile Ile His Thr Gly Glu Lys Pro Tyr Lys Cys
290 295 300
Asn Glu Cys Gly Lys Val Phe Asn Arg Leu Ser Thr Leu Ala Arg His
305 310 315 320
Arg Arg Leu His Thr Gly Glu Lys Pro Tyr Glu Cys Glu Glu Cys Glu
325 330 335
Lys Val Phe Ser Arg Lys Ser His Leu Glu Arg His Lys Arg Ile His
340 345 350
Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala
355 360 365
Tyr Asn Ser Tyr Leu Ala Lys His Ser Ile Ile His Thr Gly Glu Lys
370 375 380
Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Asn Gln Gln Ser Thr
385 390 395 400
Leu Ala Arg His His Arg Leu His Thr Ala Glu Gln Pro Tyr Lys Cys
405 410 415
Glu Glu Cys Asp Lys Val Phe Arg Cys Lys Ser His Leu Glu Arg His
420 425 430
Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp
435 440 445
Lys Ala Phe Arg Ser Asp Ser Cys Leu Thr Glu His Gln Arg Val His
450 455 460
Thr Gly Glu Lys Pro Tyr Thr Cys Asn Glu Cys Gly Lys Val Phe Ser

465 470 475 480
Thr Lys Ala Asn Leu Ala Cys His His Lys Leu His Thr Ala Glu Lys
 485 490 495
Pro Tyr Lys Cys Glu Glu Cys Glu Lys Val Phe Ser Arg Lys Ser His
 500 505 510
Met Glu Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys
 515 520 525
Lys Val Cys Asp Lys Ala Phe Arg Arg Asp Ser His Leu Ala Gln His
 530 535 540
Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
545 550 555 560
Lys Thr Phe Arg Gln Thr Ser Ser Leu Ile Ile His Arg Arg Leu His
 565 570 575
Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser
 580 585 590
Gln Met Ser Ser Leu Val Tyr His His Arg Leu His Ser Gly Glu Lys
 595 600 605
Pro Tyr Lys Cys Asn Glu Cys Gly Lys Val Phe Asn Gln Gln Ala His
 610 615 620
Leu Ala Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Lys Cys
625 630 635 640
Asn Glu Cys Gly Lys Thr Phe Ser Gln Met Ser Asn Leu Val Tyr His
 645 650 655
His Arg Leu His Ser Gly Glu Lys Pro
 660 665

<210> 322

<211> 986

<212> PRT

<213> Homo sapiens

<400> 322

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Met Pro Arg Ala Thr Trp Ala Asn Ser Lys Glu Arg Ser Trp Ala Glu
  1             5             10             15
Ser Glu Arg Gly Pro Arg Asp Thr Gly Asn Gly Gly Ser Lys Ala Glu
          20             25             30
Arg His Ile Gln Glu Ile Glu Thr Gly Arg Gly Gly Asp Arg Ala Lys
          35             40             45
Ala His Arg Arg Gln Arg Met Arg Leu Arg Gly Thr Glu Arg Ala Ser
          50             55             60
Leu Gly Pro Gly Arg Arg Leu Gly Asp Ser Arg Gly Thr Asp Met Pro
          65             70             75             80
Gly Ala Arg Ala Gln Gly Leu Ala Ala Ala Met Thr Glu Glu Ser Glu
          85             90             95
Glu Thr Val Leu Tyr Ile Glu His Arg Tyr Val Cys Ser Glu Cys Asn
          100            105            110
Gln Leu Tyr Gly Ser Leu Glu Glu Val Leu Met His Gln Asn Ser His
          115            120            125
Val Pro Gln Gln His Phe Glu Leu Val Gly Val Ala Asp Pro Gly Val
          130            135            140
Thr Val Ala Thr Asp Thr Ala Ser Gly Thr Gly Leu Tyr Gln Thr Leu
          145            150            155            160
Val Gln Glu Ser Gln Tyr Gln Cys Leu Glu Cys Gly Gln Leu Leu Met
          165            170            175
Ser Pro Ser Gln Leu Leu Glu His Gln Glu Leu His Leu Lys Met Met
          180            185            190
Ala Pro Gln Glu Ala Val Pro Ala Glu Pro Ser Pro Lys Ala Pro Pro

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195 200 205
Leu Ser Ser Ser Thr Ile His Tyr Glu Cys Val Asp Cys Lys Ala Leu
210 215 220
Phe Ala Ser Gln Glu Leu Trp Leu Asn His Arg Gln Thr His Leu Arg
225 230 235 240
Ala Thr Pro Thr Lys Ala Pro Ala Pro Val Val Leu Gly Ser Pro Val
245 250 255
Val Leu Gly Pro Pro Val Gly Gln Ala Arg Val Ala Val Glu His Ser
260 265 270
Tyr Arg Lys Ala Glu Glu Gly Gly Glu Gly Ala Thr Val Pro Ser Ala
275 280 285
Ala Ala Thr Thr Thr Glu Val Val Thr Glu Val Glu Leu Leu Leu Tyr
290 295 300
Lys Cys Ser Glu Cys Ser Gln Leu Phe Gln Leu Pro Ala Asp Phe Leu
305 310 315 320
Glu His Gln Ala Thr His Phe Pro Ala Pro Val Pro Glu Ser Gln Glu
325 330 335
Pro Ala Leu Gln Gln Glu Val Gln Ala Ser Ser Pro Ala Glu Val Pro
340 345 350
Val Ser Gln Pro Asp Pro Leu Pro Ala Ser Asp His Ser Tyr Glu Leu
355 360 365
Arg Asn Gly Glu Ala Ile Gly Arg Asp Arg Arg Gly Arg Arg Ala Arg
370 375 380
Arg Asn Asn Ser Gly Glu Ala Gly Gly Ala Ala Thr Gln Glu Leu Phe
385 390 395 400
Cys Ser Ala Cys Asp Gln Leu Phe Leu Ser Pro His Gln Leu Gln Gln
405 410 415
His Leu Arg Ser His Arg Glu Gly Val Phe Lys Cys Pro Leu Cys Ser
420 425 430

Arg Val Phe Pro Ser Pro Ser Ser Leu Asp Gln His Leu Gly Asp His
435 440 445

Ser Ser Glu Ser His Phe Leu Cys Val Asp Cys Gly Leu Ala Phe Gly
450 455 460

Thr Glu Ala Leu Leu Leu Ala His Arg Arg Ala His Thr Pro Asn Pro
465 470 475 480

Leu His Ser Cys Pro Cys Gly Lys Thr Phe Val Asn Leu Thr Lys Phe
485 490 495

Leu Tyr His Arg Arg Thr His Gly Val Gly Gly Val Pro Leu Pro Thr
500 505 510

Thr Pro Val Pro Pro Glu Glu Pro Val Ile Gly Phe Pro Glu Pro Ala
515 520 525

Pro Ala Glu Thr Gly Glu Pro Glu Ala Pro Glu Pro Pro Val Ser Glu
530 535 540

Glu Thr Ser Ala Gly Pro Ala Ala Pro Gly Thr Tyr Arg Cys Leu Leu
545 550 555 560

Cys Ser Arg Glu Phe Gly Lys Ala Leu Gln Leu Thr Arg His Gln Arg
565 570 575

Phe Val His Arg Leu Glu Arg Arg His Lys Cys Ser Ile Cys Gly Lys
580 585 590

Met Phe Lys Lys Lys Ser His Val Arg Asn His Leu Arg Thr His Thr
595 600 605

Gly Glu Arg Pro Phe Pro Cys Pro Asp Cys Ser Lys Pro Phe Asn Ser
610 615 620

Pro Ala Asn Leu Ala Arg His Arg Leu Thr His Thr Gly Glu Arg Pro
625 630 635 640

Tyr Arg Cys Gly Asp Cys Gly Lys Ala Phe Thr Gln Ser Ser Thr Leu
645 650 655

Arg Gln His Arg Leu Val His Ala Gln His Phe Pro Tyr Arg Cys Gln

660	665	670
Glu Cys Gly Val Arg Phe His Arg Pro Tyr Arg Leu Leu Met His Arg		
675	680	685
Tyr His His Thr Gly Glu Tyr Pro Tyr Lys Cys Arg Glu Cys Pro Arg		
690	695	700
Ser Phe Leu Leu Arg Arg Leu Leu Glu Val His Gln Leu Val Val His		
705	710	715
Ala Gly Arg Gln Pro His Arg Cys Pro Ser Cys Gly Ala Ala Phe Pro		
725	730	735
Ser Ser Leu Arg Leu Arg Glu His Arg Cys Ala Ala Ala Ala Ala Gln		
740	745	750
Ala Pro Arg Arg Phe Glu Cys Gly Thr Cys Gly Lys Lys Val Gly Ser		
755	760	765
Ala Ala Arg Leu Gln Ala His Glu Ala Ala His Ala Ala Ala Gly Pro		
770	775	780
Gly Glu Val Leu Ala Lys Glu Pro Pro Ala Pro Arg Ala Pro Arg Ala		
785	790	795
Thr Arg Ala Pro Val Ala Ser Pro Ala Ala Leu Gly Ser Thr Ala Thr		
805	810	815
Ala Ser Pro Ala Ala Pro Ala Arg Arg Arg Gly Leu Glu Cys Ser Glu		
820	825	830
Cys Lys Lys Leu Phe Ser Thr Glu Thr Ser Leu Gln Val His Arg Arg		
835	840	845
Ile His Thr Gly Glu Arg Pro Tyr Pro Cys Pro Asp Cys Gly Lys Ala		
850	855	860
Phe Arg Gln Ser Thr His Leu Lys Asp His Arg Arg Leu His Thr Gly		
865	870	875
Glu Arg Pro Phe Ala Cys Glu Val Cys Gly Lys Ala Phe Ala Ile Ser		
885	890	895

Met Arg Leu Ala Glu His Arg Arg Ile His Thr Gly Glu Arg Pro Tyr
900 905 910
Ser Cys Pro Asp Cys Gly Lys Ser Tyr Arg Ser Phe Ser Asn Leu Trp
915 920 925
Lys His Arg Lys Thr His Gln Gln Gln His Gln Ala Ala Val Arg Gln
930 935 940
Gln Leu Ala Glu Ala Glu Ala Ala Val Gly Leu Ala Val Met Glu Thr
945 950 955 960
Ala Val Glu Ala Leu Pro Leu Val Glu Ala Ile Glu Ile Tyr Pro Leu
965 970 975
Ala Glu Ala Glu Gly Val Gln Ile Ser Gly
980 985

<210> 323

<211> 441

<212> PRT

<213> Homo sapiens

<400> 323

Met Glu Tyr Asp Glu Lys Leu Ala Arg Phe Arg Gln Ala His Leu Asn
1 5 10 15
Pro Phe Asn Lys Gln Ser Gly Pro Arg Gln His Glu Gln Gly Pro Gly
20 25 30
Glu Glu Val Pro Asp Val Thr Pro Glu Glu Ala Leu Pro Glu Leu Pro
35 40 45
Pro Gly Glu Pro Glu Phe Arg Cys Pro Glu Arg Val Met Asp Leu Gly
50 55 60
Leu Ser Glu Asp His Phe Ser Arg Pro Val Leu Arg Gln Ala Ile Glu

65	70	75	80
Glu Cys Lys Gln Val	Ile Leu Glu Leu Pro	Glu Gln Ser Glu Lys Gln	
85	90	95	
Lys Asp Ala Val Val	Arg Leu Ile His Leu Arg	Leu Lys Leu Gln Glu	
100	105	110	
Leu Lys Asp Pro Asn	Glu Asp Glu Pro Asn	Ile Arg Val Leu Leu Glu	
115	120	125	
His Arg Phe Tyr Lys	Glu Lys Ser Lys Ser	Val Lys Gln Thr Cys Asp	
130	135	140	
Lys Cys Asn Thr Ile	Ile Trp Gly Leu Ile	Gln Thr Trp Tyr Thr Cys	
145	150	155	160
Thr Gly Cys Tyr Tyr	Arg Cys His Ser Lys	Cys Leu Asn Leu Ile Ser	
165	170	175	
Lys Pro Cys Val Ser	Ser Lys Val Ser His	Gln Ala Glu Tyr Glu Leu	
180	185	190	
Asn Ile Cys Pro Glu	Thr Gly Leu Asp Ser	Gln Asp Tyr Arg Cys Ala	
195	200	205	
Glu Cys Arg Val Pro	Ile Ser Leu Arg Gly	Val Pro Ser Glu Ala Arg	
210	215	220	
Gln Cys Asp Tyr Thr	Gly Gln Tyr Tyr Cys	Ser His Cys His Trp Asn	
225	230	235	240
Asp Leu Ala Val Ile	Pro Ala Arg Val Val	His Asn Trp Asp Phe Glu	
245	250	255	
Pro Arg Lys Val Ser	Arg Cys Ser Met Arg	Tyr Leu Ala Leu Met Val	
260	265	270	
Ser Arg Pro Val Leu	Arg Leu Arg Glu Ile	Asn Pro Leu Leu Phe Ser	
275	280	285	
Tyr Val Glu Glu Leu	Val Glu Ile Arg Lys	Leu Arg Gln Asp Ile Leu	
290	295	300	

Leu Met Lys Pro Tyr Phe Ile Thr Cys Arg Glu Ala Met Glu Ala Arg
 305 310 315 320
 Leu Leu Leu Gln Leu Gln Asp Arg Gln His Phe Val Glu Asn Asp Glu
 325 330 335
 Met Tyr Ser Val Gln Asp Leu Leu Asp Val His Ala Gly Arg Leu Gly
 340 345 350
 Cys Ser Leu Thr Glu Ile His Thr Leu Phe Ala Lys His Ile Lys Leu
 355 360 365
 Asp Cys Glu Arg Cys Gln Ala Lys Gly Phe Val Cys Glu Leu Cys Arg
 370 375 380
 Glu Gly Asp Val Leu Phe Pro Phe Asp Ser His Thr Ser Val Cys Ala
 385 390 395 400
 Asp Cys Ser Ala Val Phe His Arg Asp Cys Tyr Tyr Asp Asn Ser Thr
 405 410 415
 Thr Cys Pro Lys Cys Ala Arg Leu Ser Leu Arg Lys Gln Ser Leu Phe
 420 425 430
 Gln Glu Pro Gly Pro Asp Val Glu Ala
 435 440

<210> 324

<211> 1389

<212> PRT

<213> Homo sapiens

<400> 324

Met Lys Gln Leu Gln Pro Gln Pro Pro Pro Lys Met Gly Asp Phe Tyr
 1 5 10 15
 Asp Pro Glu His Pro Thr Pro Glu Glu Glu Glu Asn Glu Ala Lys Ile

20	25	30	
Glu Asn Val Gln Lys Thr Gly Phe Ile Lys Gly Pro Met Phe Lys Gly			
35	40	45	
Val Ala Ser Ser Arg Phe Leu Pro Lys Gly Thr Lys Thr Lys Val Asn			
50	55	60	
Leu Glu Glu Gln Gly Arg Gln Lys Val Ser Phe Ser Phe Ser Leu Thr			
65	70	75	80
Lys Lys Thr Leu Gln Asn Arg Phe Leu Thr Ala Leu Gly Asn Glu Lys			
85	90	95	
Gln Ser Asp Thr Pro Asn Pro Pro Ala Val Pro Leu Gln Val Asp Ser			
100	105	110	
Thr Pro Lys Met Lys Met Glu Ile Gly Asp Thr Leu Ser Thr Ala Glu			
115	120	125	
Glu Ser Ser Pro Pro Lys Ser Arg Val Glu Leu Gly Lys Ile His Phe			
130	135	140	
Lys Lys His Leu Leu His Val Thr Ser Arg Pro Leu Leu Ala Thr Thr			
145	150	155	160
Thr Ala Val Ala Ser Pro Pro Thr His Ala Ala Pro Leu Pro Ala Val			
165	170	175	
Ile Ala Glu Ser Thr Thr Val Asp Ser Pro Pro Ser Ser Pro Pro Pro			
180	185	190	
Pro Pro Pro Pro Ala Gln Ala Thr Thr Leu Ser Ser Pro Ala Pro Val			
195	200	205	
Thr Glu Pro Val Ala Leu Pro His Thr Pro Ile Thr Val Leu Met Ala			
210	215	220	
Ala Pro Val Pro Leu Pro Val Asp Val Ala Val Arg Ser Leu Lys Glu			
225	230	235	240
Pro Pro Ile Ile Ile Val Pro Glu Ser Leu Glu Ala Asp Thr Lys Gln			
245	250	255	

Asp Thr Ile Ser Asn Ser Leu Glu Glu His Val Thr Gln Ile Leu Asn
260 265 270
Glu Gln Ala Asp Ile Ser Ser Lys Lys Glu Asp Ser His Ile Gly Lys
275 280 285
Asp Glu Glu Ile Pro Asp Ser Ser Lys Ile Ser Leu Ser Cys Lys Lys
290 295 300
Thr Gly Ser Lys Lys Lys Ser Ser Gln Ser Glu Gly Ile Phe Leu Gly
305 310 315 320
Ser Glu Ser Asp Glu Asp Ser Val Arg Thr Ser Ser Ser Gln Arg Ser
325 330 335
His Asp Leu Lys Phe Ser Ala Ser Ile Glu Lys Glu Arg Asp Phe Lys
340 345 350
Lys Ser Ser Ala Pro Leu Lys Ser Glu Asp Leu Gly Lys Pro Ser Arg
355 360 365
Ser Lys Thr Asp Arg Asp Asp Lys Tyr Phe Ser Tyr Ser Lys Leu Glu
370 375 380
Arg Asp Thr Arg Tyr Val Ser Ser Arg Cys Arg Ser Glu Arg Glu Arg
385 390 395 400
Arg Arg Ser Arg Ser His Ser Arg Ser Glu Arg Gly Ser Arg Thr Asn
405 410 415
Leu Ser Tyr Ser Arg Ser Glu Arg Ser His Tyr Tyr Asp Ser Asp Arg
420 425 430
Arg Tyr His Arg Ser Ser Pro Tyr Arg Glu Arg Thr Arg Tyr Ser Gln
435 440 445
Pro Tyr Thr Asp Asn Arg Ala Arg Glu Ser Ser Asp Ser Glu Glu Glu
450 455 460
Tyr Lys Lys Thr Tyr Ser Arg Arg Thr Ser Ser His Ser Ser Ser Tyr
465 470 475 480
Arg Asp Leu Arg Thr Ser Ser Tyr Ser Lys Ser Asp Arg Asp Cys Lys

485	490	495
Thr Glu Thr Ser Tyr Leu Glu Met Glu Arg Arg Gly Lys Tyr Ser Ser		
500	505	510
Lys Leu Glu Arg Glu Ser Lys Arg Thr Ser Glu Asn Glu Ala Ile Lys		
515	520	525
Arg Cys Cys Ser Pro Pro Asn Glu Leu Gly Phe Arg Arg Gly Ser Ser		
530	535	540
Tyr Ser Lys His Asp Ser Ser Ala Ser Arg Tyr Lys Ser Thr Leu Ser		
545	550	555
Lys Pro Ile Pro Lys Ser Asp Lys Phe Lys Asn Ser Phe Cys Cys Thr		
565	570	575
Glu Leu Asn Glu Glu Ile Lys Gln Ser His Ser Phe Ser Leu Gln Thr		
580	585	590
Pro Cys Ser Lys Gly Ser Glu Leu Arg Met Ile Asn Lys Asn Pro Glu		
595	600	605
Arg Glu Lys Ala Gly Ser Pro Ala Pro Ser Asn Arg Leu Asn Asp Ser		
610	615	620
Pro Thr Leu Lys Lys Leu Asp Glu Leu Pro Ile Phe Lys Ser Glu Phe		
625	630	635
Ile Thr His Asp Ser His Asp Ser Ile Lys Glu Leu Asp Ser Leu Ser		
645	650	655
Lys Val Lys Asn Asp Gln Leu Arg Ser Phe Cys Pro Ile Glu Leu Asn		
660	665	670
Ile Asn Gly Ser Pro Gly Ala Glu Ser Asp Leu Ala Thr Phe Cys Thr		
675	680	685
Ser Lys Thr Asp Ala Val Leu Met Thr Ser Asp Asp Ser Val Thr Gly		
690	695	700
Ser Glu Leu Ser Pro Leu Val Lys Ala Cys Met Leu Ser Ser Asn Gly		
705	710	715
		720

Phe Gln Asn Ile Ser Arg Cys Lys Glu Lys Asp Leu Asp Asp Thr Cys
725 730 735
Met Leu His Lys Lys Ser Glu Ser Pro Phe Arg Glu Thr Glu Pro Leu
740 745 750
Val Ser Pro His Gln Asp Lys Leu Met Ser Met Pro Val Met Thr Val
755 760 765
Asp Tyr Ser Lys Thr Val Val Lys Glu Pro Val Asp Thr Arg Val Ser
770 775 780
Cys Cys Lys Thr Lys Asp Ser Asp Ile Tyr Cys Thr Leu Asn Asp Ser
785 790 795 800
Asn Pro Ser Leu Cys Asn Ser Glu Ala Glu Asn Ile Glu Pro Ser Val
805 810 815
Met Lys Ile Ser Ser Asn Ser Phe Met Asn Val His Leu Glu Ser Lys
820 825 830
Pro Val Ile Cys Asp Ser Arg Asn Leu Thr Asp His Ser Lys Phe Ala
835 840 845
Cys Glu Glu Tyr Lys Gln Ser Ile Gly Ser Thr Ser Ser Ala Ser Val
850 855 860
Asn His Phe Asp Asp Leu Tyr Gln Pro Ile Gly Ser Ser Gly Ile Ala
865 870 875 880
Ser Ser Leu Gln Ser Leu Pro Pro Gly Ile Lys Val Asp Ser Leu Thr
885 890 895
Leu Leu Lys Cys Gly Glu Asn Thr Ser Pro Val Leu Asp Ala Val Leu
900 905 910
Lys Ser Lys Lys Ser Ser Glu Phe Leu Lys His Ala Gly Lys Glu Thr
915 920 925
Ile Val Glu Val Gly Ser Asp Leu Pro Asp Ser Gly Lys Gly Phe Ala
930 935 940
Ser Arg Glu Asn Arg Arg Asn Asn Gly Leu Ser Gly Lys Cys Leu Gln

945 950 955 960
Glu Ala Gln Glu Glu Gly Asn Ser Ile Leu Pro Glu Arg Arg Gly Arg
 965 970 975
Pro Glu Ile Ser Leu Asp Glu Arg Gly Glu Gly Gly His Val His Thr
 980 985 990
Ser Asp Asp Ser Glu Val Val Phe Ser Ser Cys Asp Leu Asn Leu Thr
 995 1000 1005
Met Glu Asp Ser Asp Gly Val Thr Tyr Ala Leu Lys Cys Asp Ser Ser
 1010 1015 1020
Gly His Ala Pro Glu Ile Val Ser Thr Val His Glu Asp Tyr Ser Gly
1025 1030 1035 1040
Ser Ser Glu Ser Ser Asn Asp Glu Ser Asp Ser Glu Asp Thr Asp Ser
 1045 1050 1055
Asp Asp Ser Ser Ile Pro Arg Asn Arg Leu Gln Ser Val Val Val Val
 1060 1065 1070
Pro Lys Asn Ser Thr Leu Pro Met Glu Glu Thr Ser Pro Cys Ser Ser
 1075 1080 1085
Arg Ser Ser Gln Ser Tyr Arg His Tyr Ser Asp His Trp Glu Asp Glu
1090 1095 1100
Arg Leu Glu Ser Arg Arg His Leu Tyr Glu Glu Lys Phe Glu Ser Ile
1105 1110 1115 1120
Ala Ser Lys Ala Cys Pro Gln Thr Asp Lys Phe Phe Leu His Lys Gly
 1125 1130 1135
Thr Glu Lys Asn Pro Glu Ile Ser Phe Thr Gln Ser Ser Arg Lys Gln
 1140 1145 1150
Ile Asp Asn Arg Leu Pro Glu Leu Ser His Pro Gln Ser Asp Gly Val
 1155 1160 1165
Asp Ser Thr Ser His Thr Asp Val Lys Ser Asp Pro Leu Gly His Pro
1170 1175 1180

Asn Ser Glu Glu Thr Val Lys Ala Lys Ile Pro Ser Arg Gln Gln Glu
1185 1190 1195 1200
Glu Leu Pro Ile Tyr Ser Ser Asp Phe Glu Asp Phe Pro Asn Lys Ser
1205 1210 1215
Trp Gln Gln Thr Thr Phe Gln Asn Arg Pro Asp Ser Arg Leu Gly Lys
1220 1225 1230
Thr Glu Leu Ser Phe Ser Ser Ser Cys Glu Ile Pro His Val Asp Gly
1235 1240 1245
Leu His Ser Ser Glu Glu Leu Arg Asn Leu Gly Trp Asp Phe Ser Gln
1250 1255 1260
Glu Lys Pro Ser Thr Thr Tyr Gln Gln Pro Asp Ser Ser Tyr Gly Ala
1265 1270 1275 1280
Cys Gly Gly His Lys Tyr Gln Gln Asn Ala Glu Gln Tyr Gly Gly Thr
1285 1290 1295
Arg Asp Tyr Trp Gln Gly Asn Gly Tyr Trp Asp Pro Arg Ser Gly Arg
1300 1305 1310
Pro Pro Gly Thr Gly Val Val Tyr Asp Arg Thr Gln Gly Gln Val Pro
1315 1320 1325
Asp Ser Leu Thr Asp Asp Arg Glu Glu Glu Glu Asn Trp Asp Gln Gln
1330 1335 1340
Asp Gly Ser His Phe Ser Asp Gln Ser Asp Lys Phe Leu Leu Ser Leu
1345 1350 1355 1360
Gln Lys Asp Lys Gly Ser Val Gln Ala Pro Glu Ile Ser Ser Asn Ser
1365 1370 1375
Ile Lys Asp Thr Leu Ala Val Asn Glu Lys Lys Asp Phe
1380 1385

<210> 325

<211> 134

<212> PRT

<213> Homo sapiens

<400> 325

Met Val Gly Leu Leu Phe His Ala Pro Lys Ala Pro Glu Met Ala Pro

1 5 10 15

Leu Arg Cys Cys Ile Met Asn Lys Ile Ile Met Val Arg Arg Pro Lys

20 25 30

Gln Ser Thr Ala Asp Tyr Gly Met Arg Thr Ser Gly Pro Val Glu Ser

35 40 45

Gly Leu Ser Ala Asp Ser Leu Gln Leu Leu Cys Ser Tyr Ala Ala Ile

50 55 60

Lys Asn Ser Ala Glu Leu Leu Met Val Gly Pro Gln Gly Met Arg Pro

65 70 75 80

Ala Thr Gly Gln Asp Leu Leu Cys Arg Pro Cys Leu Ser His Asp Pro

85 90 95

Pro Gly Pro Leu His Pro Pro Arg Gly Leu Ser Gly Ser Ser Ser Leu

100 105 110

Leu Ile Ser Pro Arg Leu Gln Asp Val Ser Leu Gln Leu Val His Pro

115 120 125

Thr Pro Glu Glu Ser Phe

130

<210> 326

<211> 743

<212> PRT

<213> Homo sapiens

<400> 326

Met Ser Ser Leu Ala Ala Lys Arg Leu Gly Met Asn Arg Arg Pro Ala
 1 5 10 15
 Gly Ser Gly Gly Gly Gly Gly Glu Ala Ala Thr Trp Gly His Arg Phe
 20 25 30
 Trp Arg Pro Gln Glu Arg Pro Thr Asp Arg Asn Gln Gly Glu Met Ala
 35 40 45
 His Thr Cys Arg Gly Thr Ile Asn Leu Ser Thr Ala His Ile Asp Thr
 50 55 60
 Glu Asp Ser Cys Gly Ile Leu Leu Thr Ser Gly Ala Arg Ser Tyr His
 65 70 75 80
 Leu Lys Ala Ser Ser Glu Val Asp Arg Gln Gln Trp Ile Thr Ala Leu
 85 90 95
 Glu Leu Ala Lys Ala Lys Ala Val Arg Val Met Asn Thr His Ser Asp
 100 105 110
 Asp Ser Gly Asp Asp Asp Glu Ala Thr Thr Pro Ala Asp Lys Ser Glu
 115 120 125
 Leu His His Thr Leu Lys Asn Leu Ser Leu Lys Leu Asp Asp Leu Ser
 130 135 140
 Thr Cys Asn Asp Leu Ile Ala Lys His Gly Ala Ala Leu Gln Arg Ser
 145 150 155 160
 Leu Thr Glu Leu Asp Gly Leu Lys Ile Pro Ser Glu Ser Gly Glu Lys
 165 170 175
 Leu Lys Val Val Asn Glu Arg Ala Thr Leu Phe Arg Ile Thr Ser Asn
 180 185 190
 Ala Met Ile Asn Ala Cys Arg Asp Phe Leu Glu Leu Ala Glu Ile His
 195 200 205
 Ser Arg Lys Trp Gln Arg Ala Leu Gln Tyr Glu Gln Glu Gln Arg Val

210	215	220
His Leu Glu Glu Thr	Ile Glu Gln Leu Ala Lys	Gln His Asn Ser Leu
225	230	235
Glu Arg Ala Phe His	Ser Ala Pro Gly Arg Pro	Ala Asn Pro Ser Lys
245	250	255
Ser Phe Ile Glu Gly	Ser Leu Leu Thr Pro Lys	Gly Glu Asp Ser Glu
260	265	270
Glu Asp Glu Asp Thr	Glu Tyr Phe Asp Ala Met	Glu Asp Ser Thr Ser
275	280	285
Phe Ile Thr Val Ile	Thr Glu Ala Lys Glu Asp	Ser Arg Lys Ala Glu
290	295	300
Gly Ser Thr Gly Thr	Ser Ser Val Asp Trp Ser	Ser Ala Asp Asn Val
305	310	315
Leu Asp Gly Ala Ser	Leu Val Pro Lys Gly	Ser Ser Lys Val Lys Arg
325	330	335
Arg Val Arg Ile Pro	Asn Lys Pro Asn Tyr Ser	Leu Asn Leu Trp Ser
340	345	350
Ile Met Lys Asn Cys	Ile Gly Arg Glu Leu Ser	Arg Ile Pro Met Pro
355	360	365
Val Asn Phe Asn Glu	Pro Leu Ser Met Leu Gln	Arg Leu Thr Glu Asp
370	375	380
Leu Glu Tyr His His	Leu Leu Asp Lys Ala Val	His Cys Thr Ser Ser
385	390	395
Val Glu Gln Met Cys	Leu Val Ala Ala Phe	Ser Val Ser Ser Tyr Ser
405	410	415
Thr Thr Val His Arg	Ile Ala Lys Pro Phe	Asn Pro Met Leu Gly Glu
420	425	430
Thr Phe Glu Leu Asp	Arg Leu Asp Asp Met	Gly Leu Arg Ser Leu Cys
435	440	445

Glu Gln Val Ser His His Pro Pro Ser Ala Ala His Tyr Val Phe Ser
450 455 460
Lys His Gly Trp Ser Leu Trp Gln Glu Ile Thr Ile Ser Ser Lys Phe
465 470 475 480
Arg Gly Lys Tyr Ile Ser Ile Met Pro Leu Gly Ala Ile His Leu Glu
485 490 495
Phe Gln Ala Ser Gly Asn His Tyr Val Trp Arg Lys Ser Thr Ser Thr
500 505 510
Val His Asn Ile Ile Val Gly Lys Leu Trp Ile Asp Gln Ser Gly Asp
515 520 525
Ile Glu Ile Val Asn His Lys Thr Asn Asp Arg Cys Gln Leu Lys Phe
530 535 540
Leu Pro Tyr Ser Tyr Phe Ser Lys Glu Ala Ala Arg Lys Val Thr Gly
545 550 555 560
Val Val Ser Asp Ser Gln Gly Lys Ala His Tyr Val Leu Ser Gly Ser
565 570 575
Trp Asp Glu Gln Met Glu Cys Ser Lys Val Met His Ser Ser Pro Ser
580 585 590
Ser Pro Ser Ser Asp Gly Lys Gln Lys Thr Val Tyr Gln Thr Leu Ser
595 600 605
Ala Lys Leu Leu Trp Lys Lys Tyr Pro Leu Pro Glu Asn Ala Glu Asn
610 615 620
Met Tyr Tyr Phe Ser Glu Leu Ala Leu Thr Leu Asn Glu His Glu Glu
625 630 635 640
Gly Val Ala Pro Thr Asp Ser Arg Leu Arg Pro Asp Gln Arg Leu Met
645 650 655
Glu Lys Gly Arg Trp Asp Glu Ala Asn Thr Glu Lys Gln Arg Leu Glu
660 665 670
Glu Lys Gln Arg Leu Ser Arg Arg Arg Arg Leu Glu Ala Cys Gly Pro

675 680 685
 Gly Ser Ser Cys Ser Ser Glu Glu Glu Lys Glu Ala Asp Ala Tyr Thr
 690 695 700
 Pro Leu Trp Phe Glu Lys Arg Leu Asp Pro Leu Thr Gly Glu Met Ala
 705 710 715 720
 Cys Val Tyr Lys Gly Gly Tyr Trp Glu Ala Lys Glu Lys Gln Asp Trp
 725 730 735
 His Met Cys Pro Asn Ile Phe
 740

<210> 327

<211> 577

<212> PRT

<213> Homo sapiens

<400> 327

Met Glu Asn Glu Arg Thr Lys Asp Leu Ile Ile Glu Gln Arg Phe His
 1 5 10 15
 Arg Thr Ile Ile Gly Gln Lys Gly Glu Arg Ile Arg Glu Ile Arg Asp
 20 25 30
 Lys Phe Pro Glu Val Ile Ile Asn Phe Pro Asp Pro Ala Gln Lys Ser
 35 40 45
 Asp Ile Val Gln Leu Arg Gly Pro Lys Asn Glu Val Glu Lys Cys Thr
 50 55 60
 Lys Tyr Met Gln Lys Met Val Ala Asp Leu Val Glu Asn Ser Tyr Ser
 65 70 75 80
 Ile Ser Val Pro Ile Phe Lys Gln Phe His Lys Asn Ile Ile Gly Lys
 85 90 95

Gly Gly Ala Asn Ile Lys Lys Ile Arg Glu Glu Ser Asn Thr Lys Ile
100 105 110
Asp Leu Pro Ala Glu Asn Ser Asn Ser Glu Thr Ile Ile Ile Thr Gly
115 120 125
Lys Arg Ala Asn Cys Glu Ala Ala Arg Ser Arg Ile Leu Ser Ile Gln
130 135 140
Lys Asp Leu Ala Asn Ile Ala Glu Val Glu Val Ser Ile Pro Ala Lys
145 150 155 160
Leu His Asn Ser Leu Ile Gly Thr Lys Gly Arg Leu Ile Arg Ser Ile
165 170 175
Met Glu Glu Cys Gly Gly Val His Ile His Phe Pro Val Glu Gly Ser
180 185 190
Gly Ser Asp Thr Val Val Ile Arg Gly Pro Ser Ser Asp Val Glu Lys
195 200 205
Ala Lys Lys Gln Leu Leu His Leu Ala Glu Glu Lys Gln Thr Lys Ser
210 215 220
Phe Thr Val Asp Ile Arg Ala Lys Pro Glu Tyr His Lys Phe Leu Ile
225 230 235 240
Gly Lys Gly Gly Gly Lys Ile Arg Lys Val Arg Asp Ser Thr Gly Ala
245 250 255
Arg Val Ile Phe Pro Ala Ala Glu Asp Lys Asp Gln Asp Leu Ile Thr
260 265 270
Ile Ile Gly Lys Glu Asp Ala Val Arg Glu Ala Gln Lys Glu Leu Glu
275 280 285
Ala Leu Ile Gln Asn Leu Asp Asn Val Val Glu Asp Ser Met Leu Val
290 295 300
Asp Pro Lys His His Arg His Phe Val Ile Arg Arg Gly Gln Val Leu
305 310 315 320
Arg Glu Ile Ala Glu Glu Tyr Gly Gly Val Met Val Ser Phe Pro Arg

325 330 335
Ser Gly Thr Gln Ser Asp Lys Val Thr Leu Lys Gly Ala Lys Asp Cys
340 345 350
Val Glu Ala Ala Lys Lys Arg Ile Gln Glu Ile Ile Glu Asp Leu Glu
355 360 365
Ala Gln Val Thr Leu Glu Cys Ala Ile Pro Gln Lys Phe His Arg Ser
370 375 380
Val Met Gly Pro Lys Gly Ser Arg Ile Gln Gln Ile Thr Arg Asp Phe
385 390 395 400
Ser Val Gln Ile Lys Phe Pro Asp Arg Glu Glu Asn Ala Val His Ser
405 410 415
Thr Glu Pro Val Val Gln Glu Asn Gly Asp Glu Ala Gly Glu Gly Arg
420 425 430
Glu Ala Lys Asp Cys Asp Pro Gly Ser Pro Arg Arg Cys Asp Ile Ile
435 440 445
Ile Ile Ser Gly Arg Lys Glu Lys Cys Glu Ala Ala Lys Glu Ala Leu
450 455 460
Glu Ala Leu Val Pro Val Thr Ile Glu Val Glu Val Pro Phe Asn Leu
465 470 475 480
His Arg Tyr Val Ile Gly Gln Lys Gly Ser Gly Ile Arg Lys Met Met
485 490 495
Asp Glu Phe Glu Val Asp Pro Phe Pro Gly Arg Pro Cys His Arg Ser
500 505 510
Gly Leu Ser His Pro Leu Pro Ser Ala Ser Val Leu Ser Gln Leu Pro
515 520 525
Val Asp Ser Ala Ser Ser Cys Ser Asp Trp Ala Leu Thr Ser Leu His
530 535 540
Gly Gly Trp Pro Ser Leu Ser Pro Leu Leu Gly Pro Arg Ala Asn Gly
545 550 555 560

Leu Phe Pro Val Leu Trp Gly Pro Glu Arg Gln Val Ser Pro Leu Phe

565

570

575

Thr

<210> 328

<211> 121

<212> PRT

<213> Homo sapiens

<400> 328

Met Val Ala Asp Leu Ile Asn Val Gln Ile Thr Ser Gly Gln Ala Gln

1

5

10

15

Ser Ala Leu Phe Pro Pro Ser Pro Gln Leu Trp Leu Met Ser Ser Pro

20

25

30

Phe Leu Pro Trp Pro Arg His Gly Glu Ser Ser Ile Gly Lys Ala Lys

35

40

45

Val Ser Ser Arg Lys Thr Glu Gly Cys Ala Ser Pro Leu Glu Pro Leu

50

55

60

Pro Ser Trp Pro Gly Leu Leu Pro Val Ser Val Lys Lys Lys Lys Lys

65

70

75

80

Lys Lys Lys Ser Asp Met Gln Leu Leu Ser Thr Cys Cys Met Ser Ser

85

90

95

Met Val Arg Asp Ala Glu Lys Tyr Lys Ala Val Ser Gly Gly Gln Val

100

105

110

Glu Tyr Gln Leu His His Leu Lys Thr

115

120

<210> 329

<211> 202

<212> PRT

<213> Homo sapiens

<400> 329

Met Arg Trp Gly Leu Val Pro Ser Trp Val Lys Glu Pro Lys Lys Phe
1 5 10 15
Thr Leu Leu Ile Asn Ala Arg Ser Glu Thr Val Arg Asp Lys Pro Ala
20 25 30
Phe Lys Asn Ala Met Lys Arg Arg Arg Val Leu Val Pro Ser Asp Gly
35 40 45
Tyr Tyr Glu Trp Gln Asp Lys Asp Gly Arg Lys Arg Pro Phe Phe Ile
50 55 60
His Arg Arg Asp Gly Gln Pro Thr Gly Phe Ala Ala Leu Ala Glu Thr
65 70 75 80
Trp Met Gly Pro Asn Gly Glu Glu Phe Asp Ser Val Ala Ile Val Thr
85 90 95
Thr Gln Ala Ser Pro Asp Leu Ala Glu Leu His His Arg Val Pro Val
100 105 110
Thr Ile Ala Pro Asp Asp Phe Glu Arg Trp Leu Asp Gly Arg Ala Asn
115 120 125
Asp Val Glu Asp Val Met Pro Leu Leu Arg Ala Pro Arg Val Gly Glu
130 135 140
Phe Ala Trp His Glu Val Ser Thr Arg Val Asn Arg Val Ala Asn Asp
145 150 155 160
Asp Glu Gln Leu Val Leu Pro Ile Ser Glu Glu Gln Arg Ala Ala Glu
165 170 175

Ala Pro Lys Pro Val Lys Lys Ala Ala Pro Arg Lys Thr Thr Pro Glu
180 185 190

Pro Glu Asp Glu Gly Gln Gly Ser Leu Phe
195 200

<210> 330

<211> 339

<212> PRT

<213> Homo sapiens

<400> 330

Met Leu Pro Ser Ala Val Ala Ala His Ala Gly Ala Tyr Trp Asp Val
1 5 10 15

Val Ala Ser Ser Ala Leu Leu Asn Leu Pro Ala Ala Pro Gly Phe Gly
20 25 30

Asn Leu Gly Lys Ser Phe Leu Ile Glu Asn Leu Leu Arg Val Gly Gly
35 40 45

Ala Pro Thr Pro Arg Leu Gln Pro Pro Ala Pro His Asp Pro Ala Thr
50 55 60

Ala Leu Ala Thr Ala Gly Ala Gln Leu Arg Pro Leu Pro Ala Ser Pro
65 70 75 80

Val Pro Leu Lys Leu Cys Pro Ala Ala Glu Gln Val Ser Pro Ala Gly
85 90 95

Ala Pro Tyr Gly Thr Arg Trp Ala Phe Gln Val Leu Ser Pro Ser Ala
100 105 110

Asp Ser Ala Arg Leu Pro Gly Arg Ala Pro Gly Asp Arg Asp Cys Thr
115 120 125

Phe Gln Pro Ser Ala Pro Ala Pro Ser Lys Pro Phe Leu Leu Ser Thr

130	135	140
Pro Pro Phe Tyr Ser	Ala Cys Cys Gly Gly Ser Cys Arg Arg Pro Ala	
145	150	155
Ser Ser Thr Ala Phe Pro Arg Glu Glu Ser Val Leu Pro Leu Leu Thr		160
	165	170
Gln Asp Ser Asn Ser Lys Ala Arg Arg Gly Ile Leu Arg Arg Ala Val		175
	180	185
Phe Ser Glu Asp Gln Arg Lys Ala Leu Glu Lys Met Phe Gln Lys Gln		190
	195	200
Lys Tyr Ile Ser Lys Thr Asp Arg Lys Lys Leu Ala Ile Asn Leu Gly		205
	210	215
Leu Lys Glu Ser Gln Val Lys Ile Trp Phe Gln Asn Arg Arg Met Lys		220
	225	230
Trp Arg Asn Ser Lys Glu Lys Glu Val Leu Ser Asn Arg Cys Ile Gln		235
	245	250
Glu Val Gly Leu Gln Glu Asp Pro Leu Ser Arg Ser Ala Leu Gly Phe		255
	260	265
Pro Ser Pro Cys Pro Ser Ile Trp Asp Val Pro Gln Gln His Ser Ser		270
	275	280
Pro Arg Trp Arg Glu Asn Ser Pro Glu Pro Ser Glu Arg Leu Ile Gln		285
	290	295
Glu Ser Ser Gly Ala Pro Pro Pro Glu Ala Asn Ser Leu Gln Gly Ala		300
	305	310
Leu Tyr Leu Cys Ser Glu Glu Glu Ala Gly Ser Lys Gly Val Leu Thr		315
	325	330
		335
Gly Ala Val		

<210> 331

<211> 259

<212> PRT

<213> Homo sapiens

<400> 331

Met Val Val Gln Gly Lys Arg Met Arg Lys Glu Thr Trp Gly Tyr Phe

1 5 10 15

Cys Ser Lys Trp Asn Leu Leu Glu Leu Ala Ile Ile Leu Ala Ser Trp

20 25 30

Ser Ala Leu Ala Val Phe Val Lys Arg Ala Val Leu Ala Glu Arg Asp

35 40 45

Leu Gln Arg Cys Arg Asn His Arg Glu Glu Gly Ile Ser Phe Ser Glu

50 55 60

Thr Ala Ala Ala Asp Ala Ala Leu Gly Tyr Ile Ile Val Phe Leu Val

65 70 75 80

Leu Leu Ser Thr Val Lys Leu Trp His Leu Leu Arg Leu Asn Pro Lys

85 90 95

Met Asn Met Ile Thr Ala Ala Leu Arg Arg Ala Trp Gly Asp Ile Ser

100 105 110

Gly Phe Ile Ile Val Ile Leu Thr Met Leu Leu Ala Tyr Ser Ile Ala

115 120 125

Ser Asn Leu Ile Phe Gly Trp Lys Leu Arg Ser Tyr Lys Thr Leu Phe

130 135 140

Asp Ala Ala Glu Thr Met Val Ser Leu Gln Leu Gly Ile Phe Asn Tyr

145 150 155 160

Glu Glu Val Leu Asp Tyr Ser Pro Val Leu Gly Ser Phe Leu Ile Gly

165 170 175

Ser Cys Ile Val Phe Met Thr Phe Val Val Leu Asn Leu Phe Ile Ser

180 185 190
 Val Ile Leu Val Ala Phe Ser Glu Glu Gln Lys Tyr Tyr Gln Leu Ser
 195 200 205
 Glu Glu Gly Glu Ile Val Asp Leu Leu Leu Met Lys Ile Leu Ser Phe
 210 215 220
 Leu Gly Ile Lys Ser Lys Arg Glu Glu Pro Gly Ser Ser Arg Glu Gln
 225 230 235 240
 Pro Gly Ser Leu Ser Gln Thr Arg His Ser Arg Pro Ala Gln Ala Leu
 245 250 255
 Pro Lys Asp

<210> 332

<211> 722

<212> PRT

<213> Homo sapiens

<400> 332

Met Met Lys Glu Val Leu Ser Thr Gly Gln Gly Asn Thr Glu Val Ile
 1 5 10 15
 His Thr Gly Thr Leu Gln Arg Tyr Gln Ser Tyr His Ile Gly Asp Phe
 20 25 30
 Cys Phe Gln Glu Ile Glu Lys Glu Ile His Asp Ile Glu Phe Gln Cys
 35 40 45
 Gln Glu Asp Glu Arg Asn Gly His Glu Ala Pro Met Thr Lys Ile Lys
 50 55 60
 Lys Leu Thr Gly Ser Thr Asp Gln His Asp His Arg His Ala Gly Asn
 65 70 75 80

Lys Pro Ile Lys Asp Gln Leu Gly Ser Ser Phe Tyr Ser His Leu Pro
 85 90 95
 Glu Leu His Ile Ile Gln Ile Lys Gly Lys Ile Gly Asn Gln Phe Glu
 100 105 110
 Lys Ser Thr Ser Asp Ala Pro Ser Val Ser Thr Ser Gln Arg Ile Ser
 115 120 125
 Pro Arg Pro Gln Ile His Ile Ser Asn Asn Tyr Gly Asn Asn Ser Pro
 130 135 140
 Asn Ser Ser Leu Leu Pro Gln Lys Gln Glu Val Tyr Met Arg Glu Lys
 145 150 155 160
 Ser Phe Gln Cys Asn Glu Ser Gly Lys Ala Phe Asn Cys Ser Ser Leu
 165 170 175
 Leu Arg Lys His Gln Ile Pro His Leu Gly Asp Lys Gln Tyr Lys Cys
 180 185 190
 Asp Val Cys Gly Lys Leu Phe Asn His Lys Gln Tyr Leu Thr Cys His
 195 200 205
 Arg Arg Cys His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
 210 215 220
 Lys Ser Phe Ser Gln Val Ser Ser Leu Thr Cys His Arg Arg Leu His
 225 230 235 240
 Thr Ala Val Lys Ser His Lys Cys Asn Glu Cys Gly Lys Ile Phe Gly
 245 250 255
 Gln Asn Ser Ala Leu Val Ile His Lys Ala Ile His Thr Gly Glu Lys
 260 265 270
 Pro Tyr Lys Cys Asn Glu Cys Asp Lys Ala Phe Asn Gln Gln Ser Asn
 275 280 285
 Leu Ala Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys
 290 295 300
 Glu Glu Cys Asp Lys Val Phe Ser Arg Lys Ser Thr Leu Glu Ser His

305 310 315 320
Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp
 325 330 335
Thr Ala Phe Thr Trp Asn Ser Gln Leu Ala Arg His Lys Arg Ile His
 340 345 350
Thr Gly Glu Lys Thr Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser
 355 360 365
His Lys Ser Ser Leu Val Cys His His Arg Leu His Gly Gly Glu Lys
 370 375 380
Ser Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala Trp Asn Ser His
385 390 395 400
Leu Val Arg His Thr Arg Ile His Ser Gly Gly Lys Pro Tyr Lys Cys
 405 410 415
Asn Glu Cys Gly Lys Thr Phe Gly Gln Asn Ser Asp Leu Leu Ile His
 420 425 430
Lys Ser Ile His Thr Gly Glu Gln Pro Tyr Lys Tyr Glu Glu Cys Glu
 435 440 445
Lys Val Phe Ser Cys Gly Ser Thr Leu Glu Thr His Lys Ile Ile His
 450 455 460
Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala
465 470 475 480
Cys His Ser Tyr Leu Ala Lys His Thr Arg Ile His Ser Gly Glu Lys
 485 490 495
Pro Tyr Lys Cys Asn Glu Cys Ser Lys Thr Phe His Leu Arg Ser Tyr
 500 505 510
Leu Ala Ser His Arg Arg Val His Ser Gly Glu Lys Pro Tyr Lys Cys
 515 520 525
Asn Glu Cys Ser Lys Thr Phe Ser Gln Arg Ser Tyr Leu His Cys His
 530 535 540

Arg Arg Leu His Ser Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly
 545 550 555 560
 Lys Thr Phe Ser His Lys Pro Ser Leu Val His His Arg Arg Leu His
 565 570 575
 Thr Gly Glu Lys Ser Tyr Lys Cys Thr Val Cys Asp Lys Ala Phe Val
 580 585 590
 Arg Asn Ser Tyr Leu Ala Arg His Thr Arg Ile His Thr Ala Glu Lys
 595 600 605
 Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Asn Gln Gln Ser Gln
 610 615 620
 Leu Ser Leu His His Arg Ile His Ala Gly Glu Lys Leu Tyr Lys Cys
 625 630 635 640
 Glu Thr Cys Asp Lys Val Phe Ser Arg Lys Ser His Leu Lys Arg His
 645 650 655
 Arg Arg Ile His Pro Gly Lys Lys Pro Tyr Lys Cys Lys Val Cys Asp
 660 665 670
 Lys Thr Phe Gly Ser Asp Ser His Leu Lys Gln His Thr Gly Leu His
 675 680 685
 Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser
 690 695 700
 Lys Gln Ser Thr Leu Ile His His Gln Ala Val His Gly Val Gly Lys
 705 710 715 720
 Leu Asp

<210> 333

<211> 422

<212> PRT

<213> Homo sapiens

<400> 333

Met	Phe	Gln	Thr	Ala	Trp	Arg	Gln	Glu	Pro	Val	Thr	Phe	Glu	Asp	Val
1				5					10					15	
Ala	Val	Tyr	Phe	Thr	Gln	Asn	Glu	Trp	Ala	Ser	Leu	Asp	Ser	Val	Gln
				20				25					30		
Arg	Ala	Leu	Tyr	Arg	Glu	Val	Met	Leu	Glu	Asn	Tyr	Ala	Asn	Val	Ala
				35				40					45		
Ser	Leu	Ala	Phe	Pro	Phe	Thr	Thr	Pro	Val	Leu	Val	Ser	Gln	Leu	Glu
				50				55					60		
Gln	Gly	Glu	Leu	Pro	Trp	Gly	Leu	Asp	Pro	Trp	Glu	Pro	Met	Gly	Arg
				65				70					75		80
Glu	Ala	Leu	Arg	Gly	Ile	Cys	Pro	Gly	Asp	Glu	Ala	Arg	Thr	Glu	Lys
				85				90					95		
Glu	Gly	Leu	Thr	Pro	Lys	Asp	His	Val	Ser	Lys	Glu	Thr	Glu	Ser	Phe
				100				105					110		
Arg	Leu	Met	Val	Gly	Gly	Leu	Pro	Gly	Asn	Val	Ser	Gln	His	Leu	Asp
				115				120					125		
Phe	Gly	Ser	Ser	Leu	Glu	Gln	Pro	Gln	Gly	His	Trp	Ile	Ile	Lys	Thr
				130				135					140		
Lys	Ser	Lys	Arg	Arg	His	Phe	Thr	Asp	Thr	Ser	Ala	Arg	His	His	Glu
				145				150				155		160	
Ala	Tyr	Glu	Val	Lys	Asn	Gly	Glu	Lys	Phe	Glu	Lys	Leu	Gly	Lys	Asn
				165				170				175			
Ile	Ser	Val	Ser	Thr	Gln	Leu	Thr	Thr	Asn	Gln	Thr	Asn	Pro	Ser	Gly
				180				185				190			
Gln	Ile	Ser	Tyr	Glu	Cys	Gly	Gln	Cys	Gly	Arg	Tyr	Phe	Ile	Gln	Met
				195				200				205			

Ala Asp Phe His Arg His Glu Lys Cys His Thr Gly Glu Lys Ser Phe
 210 215 220
 Glu Cys Lys Glu Cys Gly Lys Tyr Phe Arg Tyr Asn Ser Leu Leu Ile
 225 230 235 240
 Arg His Gln Ile Ile His Thr Gly Lys Lys Pro Phe Lys Cys Lys Glu
 245 250 255
 Cys Gly Lys Gly Leu Ser Ser Asp Thr Ala Leu Ile Gln His Gln Arg
 260 265 270
 Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala
 275 280 285
 Phe Ser Ser Ser Ser Val Phe Leu Gln His Gln Arg Phe His Thr Gly
 290 295 300
 Glu Lys Leu Tyr Glu Cys Asn Glu Cys Trp Lys Thr Phe Ser Cys Ser
 305 310 315 320
 Ser Ser Phe Thr Val His Gln Arg Met His Thr Gly Glu Lys Pro Tyr
 325 330 335
 Glu Cys Lys Glu Cys Gly Lys Arg Leu Ser Ser Asn Thr Ala Leu Thr
 340 345 350
 Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Lys Glu
 355 360 365
 Cys Gly Lys Ala Phe Asn Gln Lys Ile Thr Leu Ile Gln His Gln Arg
 370 375 380
 Val His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Val Cys Gly Lys Thr
 385 390 395 400
 Phe Ser Trp Cys Gly Arg Phe Ile Leu His Gln Lys Leu His Thr Gln
 405 410 415
 Lys Thr Pro Val Gln Ala
 420

<210> 334

<211> 446

<212> PRT

<213> Homo sapiens

<400> 334

Met Glu Arg Ile Pro Val Ser Val Asp Phe Trp Val Val Cys Cys Ala

1 5 10 15

Val Leu Lys Cys Asn Pro Gly Ile Pro Lys Arg Met Ser Thr Leu Cys

20 25 30

Phe Gly Phe Ser Asp Glu Phe His Pro Phe Ile Glu Ala Leu Leu Pro

35 40 45

His Val Arg Ala Ile Ala Tyr Thr Trp Phe Asn Leu Gln Ala Gly Lys

50 55 60

Arg Lys Tyr Phe Lys Lys His Glu Lys Arg Met Ser Lys Asp Glu Glu

65 70 75 80

Arg Ala Val Lys Asp Glu Leu Leu Ser Glu Lys Pro Glu Ile Lys Gln

85 90 95

Lys Trp Ala Ser Arg Leu Leu Ala Lys Leu Arg Lys Asp Ile Arg Gln

100 105 110

Glu Tyr Arg Glu Asp Phe Val Leu Thr Val Thr Gly Lys Lys His Pro

115 120 125

Cys Cys Val Leu Ser Asn Pro Asp Gln Lys Gly Lys Ile Arg Arg Ile

130 135 140

Asp Cys Leu Arg Gln Ala Asp Lys Val Trp Arg Leu Asp Leu Val Met

145 150 155 160

Val Ile Leu Phe Lys Gly Ile Pro Leu Glu Ser Thr Asp Gly Glu Arg

165 170 175

Leu Met Lys Ser Pro His Cys Thr Asn Pro Ala Leu Cys Val Gln Pro
 180 185 190
 His His Ile Thr Val Ser Val Lys Glu Leu Asp Leu Phe Leu Ala Tyr
 195 200 205
 Tyr Val Gln Glu Gln Asp Ser Gly Gln Ser Gly Ser Pro Ser His Ser
 210 215 220
 Asp Pro Ala Lys Asn Pro Pro Gly Tyr Leu Glu Asp Ser Phe Val Lys
 225 230 235 240
 Ser Gly Val Phe Asn Val Ser Glu Leu Val Arg Val Ser Arg Thr Pro
 245 250 255
 Ile Thr Gln Gly Thr Gly Val Asn Phe Pro Ile Gly Glu Ile Pro Ser
 260 265 270
 Gln Pro Tyr Tyr His Asp Met Asn Ser Gly Val Asn Leu Gln Arg Ser
 275 280 285
 Leu Ser Ser Pro Pro Ser Ser Lys Arg Pro Lys Thr Ile Ser Ile Asp
 290 295 300
 Glu Asn Met Glu Pro Ser Pro Thr Gly Asp Phe Tyr Pro Ser Pro Ser
 305 310 315 320
 Ser Pro Ala Ala Gly Ser Arg Thr Trp His Glu Arg Asp Gln Asp Met
 325 330 335
 Ser Ser Pro Thr Thr Met Lys Lys Pro Glu Lys Pro Leu Phe Ser Ser
 340 345 350
 Ala Ser Pro Gln Asp Ser Ser Pro Arg Leu Ser Thr Phe Pro Gln His
 355 360 365
 His His Pro Gly Ile Pro Gly Val Ala His Ser Val Ile Ser Thr Arg
 370 375 380
 Thr Pro Pro Pro Pro Ser Pro Leu Pro Phe Pro Thr Gln Ala Ile Leu
 385 390 395 400
 Pro Pro Ala Pro Ser Ser Tyr Phe Ser His Pro Thr Ile Arg Tyr Pro

	405		410		415										
Pro	His	Leu	Asn	Pro	Gln	Asp	Thr	Leu	Lys	Asn	Tyr	Val	Pro	Ser	Tyr
	420		425		430										
Asp	Pro	Ser	Ser	Pro	Gln	Thr	Ser	Gln	Ser	Trp	Tyr	Leu	Gly		
	435		440		445										

<210> 335

<211> 488

<212> PRT

<213> Homo sapiens

<400> 335

Met	Arg	Ile	Ile	Thr	Ala	Pro	Ala	Ser	Lys	Val	Ser	Arg	Gly	Ser	Asn
1				5					10					15	
Glu	Leu	Met	Ile	Leu	Ala	Arg	Arg	Ser	Asp	Arg	Gly	Ser	Pro	Thr	Ser
			20					25					30		
Pro	Ala	His	Ser	Leu	Ser	Arg	Lys	Ser	Pro	Ile	Met	Tyr	Pro	Ser	Thr
			35					40					45		
Thr	Met	Ala	Asn	Ala	Pro	Gly	Leu	Val	Ser	Cys	Thr	Phe	Phe	Leu	Ala
			50				55					60			
Val	Asn	Gly	Leu	Tyr	Ser	Ser	Ser	Asp	Asp	Val	Ile	Glu	Leu	Thr	Pro
			65				70				75			80	
Ser	Asn	Phe	Asn	Arg	Glu	Val	Ile	Gln	Ser	Asp	Ser	Leu	Trp	Leu	Val
			85					90					95		
Glu	Phe	Tyr	Ala	Pro	Trp	Cys	Gly	His	Cys	Gln	Arg	Leu	Thr	Pro	Glu
			100					105					110		
Trp	Lys	Lys	Ala	Ala	Thr	Ala	Leu	Lys	Asp	Val	Val	Lys	Val	Gly	Ala
			115					120					125		

Val Asp Ala Asp Lys His His Ser Leu Gly Gly Gln Tyr Gly Val Gln
130 135 140
Gly Phe Pro Thr Ile Lys Ile Phe Gly Ser Asn Lys Asn Arg Pro Glu
145 150 155 160
Asp Tyr Gln Gly Gly Arg Thr Gly Glu Ala Ile Val Asp Ala Ala Leu
165 170 175
Ser Ala Leu Arg Gln Leu Val Lys Asp Arg Leu Gly Gly Arg Ser Gly
180 185 190
Gly Tyr Ser Ser Gly Lys Gln Gly Arg Ser Asp Ser Ser Ser Lys Lys
195 200 205
Asp Val Ile Glu Leu Thr Asp Asp Ser Phe Asp Lys Asn Val Leu Asp
210 215 220
Ser Glu Asp Val Trp Met Val Glu Phe Tyr Ala Pro Trp Cys Gly His
225 230 235 240
Cys Lys Asn Leu Glu Pro Glu Trp Ala Ala Ala Ala Ser Glu Val Lys
245 250 255
Glu Gln Thr Lys Gly Arg Val Lys Leu Ala Ala Val Asp Ala Thr Val
260 265 270
Asn Gln Val Leu Ala Ser Arg Tyr Gly Ile Arg Gly Phe Pro Thr Ile
275 280 285
Lys Ile Phe Gln Lys Gly Glu Ser Pro Val Asp Tyr Asp Gly Gly Arg
290 295 300
Thr Arg Ser Asp Ile Val Ser Arg Ala Leu Asp Leu Phe Ser Asp Asn
305 310 315 320
Ala Pro Pro Pro Glu Leu Leu Glu Ile Ile Asn Glu Asp Ile Ala Lys
325 330 335
Arg Thr Cys Glu Glu His Gln Leu Cys Val Val Ala Val Leu Pro His
340 345 350
Ile Leu Asp Thr Gly Ala Ala Gly Arg Asn Ser Tyr Leu Glu Val Leu

355 360 365
 Leu Lys Leu Ala Asp Lys Tyr Lys Lys Lys Met Trp Gly Trp Leu Trp
 370 375 380
 Thr Glu Ala Gly Ala Gln Ser Glu Leu Glu Thr Ala Leu Gly Ile Gly
 385 390 395 400
 Gly Phe Gly Tyr Pro Ala Met Ala Ala Ile Asn Ala Arg Lys Met Lys
 405 410 415
 Phe Ala Leu Leu Lys Gly Ser Phe Ser Glu Gln Gly Ile Asn Glu Phe
 420 425 430
 Leu Arg Glu Leu Ser Phe Gly Arg Gly Ser Thr Ala Pro Val Gly Gly
 435 440 445
 Gly Ala Phe Pro Thr Ile Val Glu Arg Glu Pro Trp Asp Gly Arg Asp
 450 455 460
 Gly Glu Leu Pro Val Glu Asp Asp Ile Asp Leu Ser Asp Val Glu Leu
 465 470 475 480
 Asp Asp Leu Gly Lys Asp Glu Leu
 485

<210> 336

<211> 318

<212> PRT

<213> Homo sapiens

<400> 336

Met Val Leu Ser Ser Gly Pro Gln Trp Cys Gly Ser Gln Glu Leu Trp
 1 5 10 15
 Phe Gly Lys Thr Cys Glu Glu Lys Ser Arg Leu Gly Arg Trp Pro Gly
 20 25 30

Tyr Leu Asn Gly Gly Arg Met Glu Ser Ser Thr Asn Asp Ile Ile Glu
 35 40 45
 Val Ile Val Lys Asp Glu Met Ile Ser Val Glu Glu Ser Ser Gly Asn
 50 55 60
 Thr Asp Val Asn Asn Leu Leu Gly Ile His His Lys Ile Leu Asn Glu
 65 70 75 80
 Gln Ile Phe Tyr Ile Cys Glu Glu Cys Gly Lys Cys Phe Asp Gln Asn
 85 90 95
 Glu Asp Phe Asp Gln His Gln Lys Thr His Asn Gly Glu Lys Val Tyr
 100 105 110
 Gly Cys Lys Glu Cys Gly Lys Ala Phe Ser Phe Arg Ser His Cys Ile
 115 120 125
 Ala His Gln Arg Ile His Ser Gly Val Lys Pro Tyr Glu Cys Gln Glu
 130 135 140
 Cys Ala Lys Ala Phe Val Trp Lys Ser Asn Leu Ile Arg His Gln Arg
 145 150 155 160
 Ile His Thr Gly Glu Lys Pro Phe Glu Cys Lys Glu Cys Gly Lys Gly
 165 170 175
 Phe Ser Gln Asn Thr Ser Leu Thr Gln His Gln Arg Ile His Thr Gly
 180 185 190
 Glu Lys Pro Tyr Thr Cys Lys Glu Cys Gly Lys Ser Phe Thr Arg Asn
 195 200 205
 Pro Ala Leu Leu Arg His Gln Arg Met His Thr Gly Glu Lys Pro Tyr
 210 215 220
 Glu Cys Lys Asp Cys Gly Lys Gly Phe Met Trp Asn Ser Asp Leu Ser
 225 230 235 240
 Gln His Gln Arg Val His Thr Gly Asp Lys Pro His Glu Cys Thr Asp
 245 250 255
 Cys Gly Lys Ser Phe Phe Cys Lys Ala His Leu Ile Arg His Gln Arg

260 265 270
 Ile His Thr Gly Glu Arg Pro Tyr Lys Cys Asn Asp Cys Gly Lys Ala
 275 280 285
 Phe Ser Gln Asn Ser Val Leu Ile Lys His Gln Arg Arg His Ala Arg
 290 295 300
 Asp Lys Pro Tyr Asn Cys Gln Ile Ser His Leu Leu Glu His
 305 310 315

<210> 337

<211> 743

<212> PRT

<213> Homo sapiens

<400> 337

Met Ile Ser Gln Phe Phe Ile Leu Ser Ser Lys Gly Asp Pro Leu Ile
 1 5 10 15
 Tyr Lys Asp Phe Arg Gly Asp Ser Gly Gly Arg Asp Val Ala Glu Leu
 20 25 30
 Phe Tyr Arg Lys Leu Thr Gly Leu Pro Gly Asp Glu Ser Pro Val Val
 35 40 45
 Met Asp Tyr Gly Tyr Val Gln Thr Thr Ser Thr Glu Met Leu Arg Asn
 50 55 60
 Phe Ile Gln Thr Glu Ala Val Val Ser Lys Pro Phe Ser Leu Phe Asp
 65 70 75 80
 Leu Ser Ser Val Gly Leu Phe Gly Ala Glu Thr Gln Gln Ser Lys Val
 85 90 95
 Ala Pro Ser Ser Ala Ala Ser Arg Pro Val Leu Ser Ser Arg Ser Asp
 100 105 110

Gln Ser Gln Lys Asn Glu Val Phe Leu Asp Val Val Glu Arg Leu Ser
115 120 125
Val Leu Ile Ala Ser Asn Gly Ser Leu Leu Lys Val Asp Val Gln Gly
130 135 140
Glu Ile Arg Leu Lys Ser Phe Leu Pro Ser Gly Ser Glu Met Arg Ile
145 150 155 160
Gly Leu Thr Glu Glu Phe Cys Val Gly Lys Ser Glu Leu Arg Gly Tyr
165 170 175
Gly Pro Gly Ile Arg Val Asp Glu Val Ser Phe His Ser Ser Val Asn
180 185 190
Leu Asp Glu Phe Glu Ser His Arg Ile Leu Arg Leu Gln Pro Pro Gln
195 200 205
Gly Glu Leu Thr Val Met Arg Tyr Gln Leu Ser Asp Asp Leu Pro Ser
210 215 220
Pro Leu Pro Phe Arg Leu Phe Pro Ser Val Gln Trp Asp Arg Gly Ser
225 230 235 240
Gly Arg Leu Gln Val Tyr Leu Lys Leu Arg Cys Asp Leu Leu Ser Lys
245 250 255
Ser Gln Ala Leu Asn Val Arg Leu His Leu Pro Leu Pro Arg Gly Val
260 265 270
Val Ser Leu Ser Gln Glu Leu Ser Ser Pro Glu Gln Lys Ala Glu Leu
275 280 285
Ala Glu Gly Ala Leu Arg Trp Asp Leu Pro Arg Val Gln Gly Gly Ser
290 295 300
Gln Leu Ser Gly Leu Phe Gln Ser Arg Lys Gly Ala Asp Leu Asp Arg
305 310 315 320
Glu Lys Lys Ala Ala Glu Cys Lys Val Asp Ser Ile Gly Ser Gly Arg
325 330 335
Ala Ile Pro Ile Lys Gln Gly Ile Leu Leu Lys Arg Ser Gly Lys Ser

340 345 350
Leu Asn Lys Glu Trp Lys Lys Lys Tyr Val Thr Leu Cys Asp Asn Gly
355 360 365
Leu Leu Thr Tyr His Pro Ser Leu His Asp Tyr Met Gln Asn Ile His
370 375 380
Gly Lys Glu Ile Asp Leu Leu Arg Thr Thr Val Lys Val Pro Gly Lys
385 390 395 400
Arg Leu Pro Arg Ala Thr Pro Ala Thr Ala Pro Gly Thr Ser Pro Arg
405 410 415
Ala Asn Gly Leu Ser Val Glu Arg Ser Asn Thr Gln Leu Gly Gly Gly
420 425 430
Thr Glu Ala Glu Glu Ser Phe Glu Phe Val Val Val Ser Leu Thr Gly
435 440 445
Gln Thr Trp His Phe Glu Ala Ser Thr Ala Glu Glu Arg Glu Leu Trp
450 455 460
Val Gln Ser Val Gln Ala Gln Ile Leu Ala Ser Leu Gln Gly Cys Arg
465 470 475 480
Ser Ala Lys Asp Lys Thr Arg Leu Gly Asn Gln Asn Ala Ala Leu Ala
485 490 495
Val Gln Ala Val Arg Thr Val Arg Gly Asn Ser Phe Cys Ile Asp Cys
500 505 510
Asp Ala Pro Asn Pro Asp Trp Ala Ser Leu Asn Leu Gly Ala Leu Met
515 520 525
Cys Ile Glu Cys Ser Gly Ile His Arg His Leu Gly Ala His Leu Ser
530 535 540
Arg Val Arg Ser Leu Asp Leu Asp Asp Trp Pro Pro Glu Leu Leu Ala
545 550 555 560
Val Met Thr Ala Met Gly Asn Ala Leu Ala Asn Ser Val Trp Glu Gly
565 570 575

Ala Leu Gly Gly Tyr Ser Lys Pro Gly Pro Asp Ala Cys Arg Glu Glu
580 585 590
Lys Glu Arg Trp Ile Arg Ala Lys Tyr Glu Gln Lys Leu Phe Leu Ala
595 600 605
Pro Leu Pro Ser Ser Asp Val Pro Leu Gly Gln Gln Leu Leu Arg Ala
610 615 620
Val Val Glu Asp Asp Leu Arg Leu Leu Val Met Leu Leu Ala His Gly
625 630 635 640
Ser Lys Glu Glu Val Asn Glu Thr Tyr Gly Asp Gly Asp Gly Arg Thr
645 650 655
Ala Leu His Leu Ser Ser Ala Met Ala Asn Val Val Phe Thr Gln Leu
660 665 670
Leu Ile Trp Tyr Gly Val Asp Val Arg Ser Arg Asp Ala Arg Gly Leu
675 680 685
Thr Pro Leu Ala Tyr Ala Arg Arg Ala Gly Ser Gln Glu Cys Ala Asp
690 695 700
Ile Leu Ile Gln His Gly Cys Pro Gly Glu Gly Cys Gly Leu Ala Pro
705 710 715 720
Thr Pro Asn Arg Glu Pro Ala Asn Gly Thr Asn Pro Ser Ala Glu Leu
725 730 735
His Arg Ser Pro Ser Leu Leu
740

<210> 338

<211> 141

<212> PRT

<213> Homo sapiens

<400> 338

Met Gln Ile Gln Glu Ile Gln Arg Thr Pro Leu Arg Tyr Ser Lys Arg
 1 5 10 15
 Arg Ser Thr Pro Arg Pro Leu Ile Ile Gly Phe Ser Lys Val Glu Leu
 20 25 30
 Leu Arg Ala Ala Arg Glu Lys Gly Gln Val Thr Tyr Lys Gly Lys Pro
 35 40 45
 Ile Arg Pro Thr Ala Asp Phe Ser Ala Glu Pro Leu Gln Ala Arg Arg
 50 55 60
 Asp Cys Gly Pro Ile Ser Asn Ile Leu Lys Gly Lys Asn Phe Gln Pro
 65 70 75 80
 Arg Ile Ser Tyr Pro Ala Lys Leu Ile Ser Phe Ile Ser Glu Gly Glu
 85 90 95
 Ile Lys Ser Phe Pro Asp Lys Gln Met Leu Arg Asp Phe Val Thr Thr
 100 105 110
 Arg Pro Ala Leu Gln Glu Leu Leu Lys Glu Ala Leu Asn Met Glu Arg
 115 120 125
 Lys Asn Gln Tyr Gln Pro Leu Gln Lys His Thr Lys Ile
 130 135 140

<210> 339

<211> 715

<212> PRT

<213> Homo sapiens

<400> 339

Met Ala Thr Phe Met Asp Pro Gly Val Phe Pro Arg Ala Asp Glu Asp
 1 5 10 15

Glu Asp Lys Glu Asp Asp Phe Arg Ala Pro Leu Tyr Lys Asn Val Asp
 20 25 30
 Val Arg Gly Ile Gln Val Arg Met Lys Trp Cys Ala Thr Cys His Phe
 35 40 45
 Tyr Arg Pro Pro Arg Cys Ser His Cys Ser Val Cys Asp Asn Cys Val
 50 55 60
 Glu Asp Phe Asp His His Cys Pro Trp Val Asn Asn Cys Ile Gly Arg
 65 70 75 80
 Arg Asn Tyr Arg Tyr Phe Phe Leu Phe Leu Leu Ser Leu Ser Ala His
 85 90 95
 Met Val Gly Val Val Ala Phe Gly Leu Val Tyr Val Leu Asn His Ala
 100 105 110
 Glu Gly Leu Gly Ala Ala His Thr Thr Ile Thr Met Ala Val Met Cys
 115 120 125
 Val Ala Gly Leu Phe Phe Ile Pro Val Ile Gly Leu Thr Gly Phe His
 130 135 140
 Val Val Leu Val Thr Arg Gly Arg Thr Thr Asn Glu Gln Val Thr Gly
 145 150 155 160
 Lys Phe Arg Gly Gly Val Asn Pro Phe Thr Arg Gly Cys Cys Gly Asn
 165 170 175
 Val Glu His Val Leu Cys Ser Pro Leu Ala Pro Arg Tyr Val Val Glu
 180 185 190
 Pro Pro Arg Leu Pro Leu Ala Val Ser Leu Lys Pro Pro Phe Leu Arg
 195 200 205
 Pro Glu Leu Leu Asp Arg Ala Ala Pro Leu Lys Val Lys Leu Ser Asp
 210 215 220
 Asn Gly Leu Lys Ala Gly Leu Gly Arg Ser Lys Ser Lys Gly Ser Leu
 225 230 235 240
 Asp Arg Leu Asp Glu Lys Pro Leu Asp Leu Gly Pro Pro Leu Pro Pro

	245		250		255										
Lys	Ile	Glu	Ala	Gly	Thr	Phe	Ser	Ser	Asp	Leu	Gln	Thr	Pro	Arg	Pro
	260						265					270			
Gly	Ser	Ala	Glu	Ser	Ala	Leu	Ser	Val	Gln	Arg	Thr	Ser	Pro	Pro	Thr
	275						280					285			
Pro	Ala	Met	Tyr	Lys	Phe	Arg	Pro	Ala	Phe	Pro	Thr	Gly	Pro	Lys	Val
	290					295					300				
Pro	Phe	Cys	Gly	Pro	Gly	Glu	Gln	Val	Pro	Gly	Pro	Asp	Ser	Leu	Thr
305					310					315				320	
Leu	Gly	Asp	Asp	Ser	Ile	Arg	Ser	Leu	Asp	Phe	Val	Ser	Glu	Pro	Ser
			325					330					335		
Leu	Asp	Leu	Pro	Asp	Tyr	Gly	Pro	Gly	Gly	Leu	His	Ala	Ala	Tyr	Pro
		340						345					350		
Pro	Ser	Pro	Pro	Leu	Ser	Ala	Ser	Asp	Ala	Phe	Ser	Gly	Ala	Leu	Arg
		355					360					365			
Ser	Leu	Ser	Leu	Lys	Ala	Ser	Ser	Arg	Arg	Gly	Gly	Asp	His	Val	Ala
	370					375					380				
Leu	Gln	Pro	Leu	Arg	Ser	Glu	Gly	Gly	Pro	Pro	Thr	Pro	His	Arg	Ser
385				390					395					400	
Ile	Phe	Ala	Pro	His	Ala	Leu	Pro	Asn	Arg	Asn	Gly	Ser	Leu	Ser	Tyr
			405						410				415		
Asp	Ser	Leu	Leu	Asn	Pro	Gly	Ser	Pro	Gly	Gly	His	Ala	Cys	Pro	Ala
		420						425				430			
His	Pro	Ala	Val	Gly	Val	Ala	Gly	Tyr	His	Ser	Pro	Tyr	Leu	His	Pro
	435						440					445			
Gly	Ala	Thr	Gly	Asp	Pro	Pro	Arg	Pro	Leu	Pro	Arg	Ser	Phe	Ser	Pro
	450					455					460				
Val	Leu	Gly	Pro	Arg	Pro	Arg	Glu	Pro	Ser	Pro	Val	Arg	Tyr	Asp	Asn
465				470						475				480	

Leu Ser Arg Thr Ile Met Ala Ser Ile Gln Glu Arg Lys Asp Arg Glu
485 490 495
Glu Arg Glu Arg Leu Leu Arg Ser Gln Ala Asp Ser Leu Phe Gly Asp
500 505 510
Ser Gly Val Tyr Asp Ala Pro Ser Ser Tyr Ser Leu Gln Gln Ala Ser
515 520 525
Val Leu Ser Glu Gly Pro Arg Gly Pro Ala Leu Arg Tyr Gly Ser Arg
530 535 540
Asp Asp Leu Val Ala Gly Pro Gly Phe Gly Gly Ala Arg Asn Pro Ala
545 550 555 560
Leu Gln Thr Ser Leu Ser Ser Leu Ser Ser Ser Val Ser Arg Ala Pro
565 570 575
Arg Thr Ser Ser Ser Ser Leu Gln Ala Asp Gln Ala Ser Ser Asn Ala
580 585 590
Pro Gly Pro Arg Pro Ser Ser Gly Ser His Arg Ser Pro Ala Arg Gln
595 600 605
Gly Leu Pro Ser Pro Pro Gly Thr Pro His Ser Pro Ser Tyr Ala Gly
610 615 620
Pro Lys Ala Val Ala Phe Ile His Thr Asp Leu Pro Glu Pro Pro Pro
625 630 635 640
Ser Leu Thr Val Gln Arg Gly Arg Ile Gly Thr Cys Thr Arg Gly Trp
645 650 655
Gly Arg Arg Gly Gln Pro Trp Val Pro Pro Gly Leu His Leu Cys His
660 665 670
Leu Gly Arg Pro Glu Asp Arg Pro Pro Leu Arg Ala Pro Trp Ser Gln
675 680 685
Ala Ala Gly Ala Pro Pro Arg Gly Ala Met Cys Arg Leu His Leu Ala
690 695 700
Ala Ser Ser Leu Phe Pro Ser Leu Ser Gly Pro

705

710

715

<210> 340

<211> 851

<212> PRT

<213> Homo sapiens

<400> 340

Met Ser Val Ser Phe His Thr His Thr Lys Glu Leu Trp Thr Trp Met

1

5

10

15

Glu Asp Leu Gln Lys Glu Met Leu Glu Asp Val Cys Ala Asp Ser Val

20

25

30

Asp Ala Val Gln Glu Leu Ile Lys Gln Phe Gln Gln Gln Gln Thr Ala

35

40

45

Thr Leu Asp Ala Thr Leu Asn Val Ile Lys Glu Gly Glu Asp Leu Ile

50

55

60

Gln Gln Leu Arg Asp Ser Ala Val Ser Asn Asn Lys Thr Pro His Ser

65

70

75

80

Ser Ser Ile Ser His Ile Glu Ser Val Leu Gln Gln Leu Asp Asp Ala

85

90

95

Gln Val Gln Met Glu Glu Leu Phe His Glu Arg Lys Ile Lys Leu Asp

100

105

110

Ile Phe Leu Gln Leu Arg Ile Phe Glu Gln Tyr Thr Ile Glu Val Thr

115

120

125

Ala Glu Leu Asp Ala Trp Asn Glu Asp Leu Leu Arg Gln Met Asn Asp

130

135

140

Phe Asn Thr Glu Asp Leu Thr Leu Ala Glu Gln Arg Leu Gln Arg His

145

150

155

160

Thr Glu Arg Lys Leu Ala Met Asn Asn Met Thr Phe Glu Val Ile Gln
 165 170 175
 Gln Gly Gln Asp Leu His Gln Tyr Ile Thr Glu Val Gln Ala Ser Gly
 180 185 190
 Ile Glu Leu Ile Cys Glu Lys Asp Ile Asp Leu Ala Ala Gln Val Gln
 195 200 205
 Glu Leu Leu Glu Phe Leu His Glu Lys Gln His Glu Leu Glu Leu Asn
 210 215 220
 Ala Glu Gln Thr His Lys Arg Leu Glu Gln Cys Leu Gln Leu Arg His
 225 230 235 240
 Leu Gln Ala Glu Val Lys Gln Val Leu Gly Trp Ile Arg Asn Gly Glu
 245 250 255
 Ser Met Leu Asn Ala Ser Leu Val Asn Ala Ser Ser Leu Ser Glu Ala
 260 265 270
 Glu Gln Leu Gln Arg Glu His Glu Gln Phe Gln Leu Ala Ile Glu Ser
 275 280 285
 Leu Phe His Ala Thr Ser Leu Gln Lys Thr His Gln Ser Ala Leu Gln
 290 295 300
 Val Gln Gln Lys Ala Glu Val Leu Leu Gln Ala Gly His Tyr Asp Ala
 305 310 315 320
 Asp Ala Ile Arg Glu Cys Ala Glu Lys Val Ala Leu His Trp Gln Gln
 325 330 335
 Leu Met Leu Lys Met Glu Asp Arg Leu Lys Leu Val Asn Ala Ser Val
 340 345 350
 Ala Phe Tyr Lys Thr Ser Glu Gln Val Cys Ser Val Leu Glu Ser Leu
 355 360 365
 Glu Gln Glu Tyr Arg Arg Asp Glu Asp Trp Cys Gly Gly Arg Asp Lys
 370 375 380
 Leu Gly Pro Ala Ala Glu Ile Asp His Val Ile Pro Leu Ile Ser Lys

385 390 395 400
His Leu Glu Gln Lys Glu Ala Phe Leu Lys Ala Cys Thr Leu Ala Arg
 405 410 415
Arg Asn Ala Glu Val Phe Leu Lys Tyr Ile His Arg Asn Asn Val Ser
 420 425 430
Met Pro Ser Val Ala Ser His Thr Arg Gly Pro Glu Gln Gln Val Lys
 435 440 445
Ala Ile Leu Ser Glu Leu Leu Gln Arg Glu Asn Arg Val Leu His Phe
 450 455 460
Trp Thr Leu Lys Lys Arg Arg Leu Asp Gln Cys Gln Gln Tyr Val Val
465 470 475 480
Phe Glu Arg Ser Ala Lys Gln Ala Leu Asp Trp Ile Gln Glu Thr Gly
 485 490 495
Glu Phe Tyr Leu Ser Thr His Thr Ser Thr Gly Glu Thr Thr Glu Glu
 500 505 510
Thr Gln Glu Leu Leu Lys Glu Tyr Gly Glu Phe Arg Val Pro Ala Lys
 515 520 525
Gln Thr Lys Glu Lys Val Lys Leu Leu Ile Gln Leu Ala Asp Ser Phe
 530 535 540
Val Glu Lys Gly His Ile His Ala Thr Glu Ile Arg Lys Trp Val Thr
545 550 555 560
Thr Val Asp Lys His Tyr Arg Asp Phe Ser Leu Arg Met Gly Lys Tyr
 565 570 575
Arg Tyr Ser Leu Glu Lys Ala Leu Gly Val Asn Thr Glu Asp Asn Lys
 580 585 590
Asp Leu Glu Leu Asp Ile Ile Pro Ala Ser Leu Ser Asp Arg Glu Val
 595 600 605
Lys Leu Arg Asp Ala Asn His Glu Val Asn Glu Glu Lys Arg Lys Ser
 610 615 620

Ala Arg Lys Lys Glu Phe Ile Met Ala Glu Leu Leu Gln Thr Glu Lys
625 630 635 640
Ala Tyr Val Arg Asp Leu His Glu Cys Leu Glu Thr Tyr Leu Trp Glu
645 650 655
Met Thr Ser Gly Val Glu Glu Ile Pro Pro Gly Ile Leu Asn Lys Glu
660 665 670
His Ile Ile Phe Gly Asn Ile Gln Glu Ile Tyr Asp Phe His Asn Asn
675 680 685
Ile Phe Leu Lys Glu Leu Glu Lys Tyr Glu Gln Leu Pro Glu Asp Val
690 695 700
Gly His Cys Phe Val Thr Trp Ala Asp Lys Phe Gln Met Tyr Val Thr
705 710 715 720
Tyr Cys Lys Asn Lys Pro Asp Ser Asn Gln Leu Ile Leu Glu His Ala
725 730 735
Gly Thr Phe Phe Asp Glu Ile Gln Gln Arg His Gly Leu Ala Asn Ser
740 745 750
Ile Ser Ser Tyr Leu Ile Lys Pro Val Gln Arg Ile Thr Lys Tyr Gln
755 760 765
Leu Leu Leu Lys Glu Leu Leu Thr Cys Cys Glu Glu Gly Lys Gly Glu
770 775 780
Leu Lys Asp Gly Leu Glu Val Met Leu Ser Val Pro Lys Lys Ala Asn
785 790 795 800
Asp Ala Met His Val Ser Met Leu Glu Gly Ser Cys Pro Pro Ser Thr
805 810 815
Gly Glu Ala Ser Ser Leu Pro Arg His Gly Gly Ala Cys Ile Met Gly
820 825 830
Gly Lys Trp His Glu Val Arg Gln Gly Ala Arg Leu Glu Glu Arg Arg
835 840 845
Asn Asp Lys

850

<210> 341

<211> 312

<212> PRT

<213> Homo sapiens

<400> 341

Met Ile Ala Val Gly Ser Met Asp Tyr Gly Leu Trp Gln Leu Phe Cys

1 5 10 15

Thr Leu Glu Leu Pro Leu Ile Pro Ile Leu Ala Val Met Glu Ser His

20 25 30

Ala Ile Gln Val Asn Lys Glu Glu Met Glu Lys Thr Ser Ala Leu Leu

35 40 45

Gly Ala Arg Leu Lys Glu Leu Glu Gln Glu Ala His Phe Val Ala Gly

50 55 60

Glu Arg Phe Leu Ile Thr Ser Asn Asn Gln Leu Arg Glu Ile Leu Phe

65 70 75 80

Gly Lys Leu Lys Leu His Leu Leu Ser Gln Arg Asn Ser Leu Pro Arg

85 90 95

Thr Gly Leu Gln Lys Tyr Pro Ser Thr Ser Glu Ala Val Asn Ile Gln

100 105 110

Gly Ile Ser Lys His Pro Ile Gln Ile Thr Thr Pro Lys Asn Phe Lys

115 120 125

Gly Lys Glu Asp Lys Ile Leu Thr Ile Ser Pro Arg Ala Met Phe Val

130 135 140

Ser Ser Lys Gly His Thr Phe Leu Ala Ala Asp Phe Ser Gln Ile Glu

145 150 155 160

Leu Arg Ile Leu Thr His Leu Ser Gly Asp Pro Glu Leu Leu Lys Leu
 165 170 175
 Phe Gln Glu Ser Glu Arg Asp Asp Val Phe Ser Thr Leu Thr Ser Gln
 180 185 190
 Trp Lys Asp Val Pro Val Glu Gln Val Thr His Ala Asp Arg Glu Gln
 195 200 205
 Thr Lys Lys Val Val Tyr Ala Val Val Tyr Gly Ala Gly Lys Glu Arg
 210 215 220
 Leu Ala Ala Cys Leu Gly Val Pro Ile Gln Glu Ala Ala Gln Phe Leu
 225 230 235 240
 Glu Ser Phe Leu Gln Lys Tyr Lys Lys Ile Lys Asp Phe Ala Arg Ala
 245 250 255
 Ala Ile Ala Gln Cys His Gln Thr Gly Cys Val Val Ser Ile Met Gly
 260 265 270
 Arg Arg Arg Pro Leu Pro Arg Ile His Ala His Asp Gln Gln Leu Arg
 275 280 285
 Ala Gln Ala Glu Arg Gln Ala Val Asn Phe Val Val Gln Ala Gln Ser
 290 295 300
 Gln His Leu Cys Val Glu Val Pro
 305 310

<210> 342

<211> 123

<212> PRT

<213> Homo sapiens

<400> 342

Met Pro Gly Pro Pro Gly Ser Leu Glu Met Gly Pro Leu Thr Phe Arg

1	5	10	15
Asp Val Ala Ile Glu Phe Ser Leu Glu Glu Trp Gln Cys Leu Asp Thr			
20	25	30	
Ala Gln Arg Asn Leu Tyr Arg Lys Val Met Phe Glu Asn Tyr Arg Asn			
35	40	45	
Leu Val Phe Leu Gly Ile Ala Val Ser Lys Pro His Leu Ile Thr Cys			
50	55	60	
Leu Glu Gln Gly Lys Glu Pro Trp Asn Arg Lys Arg Gln Glu Met Val			
65	70	75	80
Ala Lys Pro Pro Glu Ser Tyr Cys Val Ala Gln Ala Asp Leu Glu Leu			
85	90	95	
Leu Val Ser Ser Tyr Leu Thr Ala Leu Ala Ser Leu Lys Met Trp Asp			
100	105	110	
Tyr Arg Asn Asn Pro Leu Cys Gln Ala Thr Met			
115	120		

<210> 343

<211> 301

<212> PRT

<213> Homo sapiens

<400> 343

Met Ala Val Arg Pro Gly Leu Trp Pro Ala Leu Leu Gly Ile Val Leu			
1	5	10	15
Ala Ala Trp Leu Arg Gly Ser Gly Ala Gln Gln Ser Ala Thr Val Ala			
20	25	30	
Asn Pro Val Pro Gly Ala Asn Pro Asp Leu Leu Pro His Phe Leu Val			
35	40	45	

Glu Pro Glu Asp Val Tyr Ile Val Lys Asn Lys Pro Val Leu Leu Val
 50 55 60
 Cys Lys Ala Val Pro Ala Thr Gln Ile Phe Phe Lys Cys Asn Gly Glu
 65 70 75 80
 Trp Val Arg Gln Val Asp His Val Ile Glu Arg Ser Thr Asp Gly Ser
 85 90 95
 Asn Gly Leu Pro Thr Met Glu Val Arg Ile Asn Val Ser Arg Gln Gln
 100 105 110
 Val Glu Lys Val Phe Gly Leu Glu Glu Tyr Trp Cys Gln Cys Val Ala
 115 120 125
 Trp Ser Ser Ser Gly Thr Thr Lys Ser Gln Lys Ala Tyr Ile Arg Ile
 130 135 140
 Ala Tyr Leu Arg Lys Asn Phe Glu Gln Glu Pro Leu Ala Lys Glu Val
 145 150 155 160
 Ser Leu Glu Gln Gly Ile Val Leu Pro Cys Arg Pro Pro Glu Gly Ile
 165 170 175
 Pro Pro Ala Glu Val Glu Trp Leu Arg Asn Glu Asp Leu Val Asp Pro
 180 185 190
 Ser Leu Asp Pro Asn Val Tyr Ile Thr Arg Glu His Ser Leu Val Val
 195 200 205
 Arg Gln Ala Arg Leu Ala Asp Thr Ala Asn Tyr Thr Cys Val Ala Lys
 210 215 220
 Asn Ile Val Ala Arg Arg Arg Ser Ala Ser Ala Ala Val Ile Val Tyr
 225 230 235 240
 Val Asp Gly Ser Trp Ser Pro Trp Ser Lys Trp Ser Ala Cys Gly Leu
 245 250 255
 Asp Cys Thr His Trp Arg Ser Arg Glu Cys Ser Asp Pro Ala Pro Arg
 260 265 270
 Asn Gly Gly Glu Glu Cys Gln Gly Thr Asp Leu Asp Thr Arg Asn Cys

275 280 285
Thr Ser Asp Leu Cys Val His Ser Glu Ser Ser Leu Pro
290 295 300

<210> 344

<211> 101

<212> PRT

<213> Homo sapiens

<400> 344

Met Leu Arg Glu Val Cys Val Cys Val Cys Val Cys Val Cys Val Cys
1 5 10 15
Pro Leu Cys Thr Glu Ala Ala Val Arg Asp Val Thr Asn Leu Asn Leu
20 25 30
Pro Glu Ser Trp Arg Phe Thr Phe Cys Lys Gly Arg Gly His Ser Trp
35 40 45
Thr Val Thr Ile Pro Ile Leu Val Arg Val Ala Gly Thr Glu Gln Ser
50 55 60
His Gln His Ala Lys Val His Leu Gln Ser Ser Met His Ala Pro Arg
65 70 75 80
Lys Pro Pro Val Gly Tyr Ala Ser Cys Thr Phe Pro Phe Ser Leu Thr
85 90 95
Ser Val Ser Cys Leu
100

<210> 345

<211> 116

<212> PRT

<213> Homo sapiens

<400> 345

Met Thr Phe Arg Ser Gly Gly Gly Asp Ala Leu Gly Lys Ala Ala Cys

1 5 10 15

Leu Val Pro Ala Ala Ser Arg Pro Gln Ser Pro Ile Leu Gln Met Thr

20 25 30

Ser Arg Glu Val Thr Pro Gln Val Gly Asn Arg Ala Gly Phe Gly Ile

35 40 45

Arg Val Cys Leu Phe Pro Pro Arg Asp Pro Glu Ser Trp Gln Pro Val

50 55 60

Ser Lys Leu Leu Tyr Val His His Thr Ser Gly Phe Arg Phe Ile Gly

65 70 75 80

Val Phe Leu Lys Leu Arg Leu Val Ser Val Gln Leu Leu Leu Val Arg

85 90 95

His Leu Ser Tyr Thr Arg His Cys Pro Trp Cys Trp Arg His Ser Asn

100 105 110

Glu Glu Asp Arg

115

<210> 346

<211> 166

<212> PRT

<213> Homo sapiens

<400> 346

Met Arg His Thr Ser Lys Arg Lys Pro Gln Tyr Tyr Glu Ala Glu Met

1 5 10 15
Val Leu Lys Tyr Tyr Lys His Leu Glu Glu Gly Ser Val Ser Leu Cys
 20 25 30
Cys Pro Gly Trp Ser Ala Val Ala Gln Ser Arg Leu Thr Ala Ala Ser
 35 40 45
Thr Phe Gly Ala Gln Val Ile Leu Leu Phe Gln Leu Ser Glu Gln Leu
 50 55 60
Arg Leu Gln Glu Leu Lys Leu Pro Thr Phe Arg Ala His Ser Pro Leu
65 70 75 80
Leu Lys Ser Arg Arg Phe Phe Val Asp Ile Leu Thr Leu Leu Ser Ser
 85 90 95
His Cys Gln Leu Cys Pro Ala Ala Arg His Leu Ala Val Tyr Leu Leu
 100 105 110
Asp His Phe Met Asp Arg Tyr Asn Val Thr Thr Ser Lys Gln Leu Tyr
 115 120 125
Thr Val Ala Val Ser Cys Leu Leu Leu Ala Ser Arg Asn Lys Gly Ser
 130 135 140
Gly Ser Pro Val Pro Thr Arg Ser Ala Gln Gln Cys Arg Gln Thr Trp
145 150 155 160
Ala Arg Gly Ser Pro Trp
 165

<210> 347

<211> 165

<212> PRT

<213> Homo sapiens

<400> 347

Met Leu Phe Phe Asn Lys Lys Asn Phe Phe Asn His Gly Leu Ser Gly
 1 5 10 15
 Phe Ser Cys Pro Leu Asp Thr Phe Leu Cys Leu Ser Leu Ser Leu Phe
 20 25 30
 Pro Ala Leu His Arg Gly Pro Pro Gly Ser Arg Gly Pro Leu Ile Pro
 35 40 45
 Pro Leu Leu Ser Leu Pro Pro Pro Pro Trp Gly Arg Gly Pro Ile Arg
 50 55 60
 Arg Gly Leu Gly Pro Arg Ser Ser Pro Tyr Gly Arg Gly Trp Trp Gly
 65 70 75 80
 Val Asn Ala Glu Pro Pro Phe Pro Gly Pro Gly His Gly Gly Pro Thr
 85 90 95
 Arg Gly Ser Phe His Lys Glu Gln Arg Asn Pro Arg Arg Leu Lys Ser
 100 105 110
 Trp Ser Leu Ile Lys Asn Thr Cys Pro Pro Lys Asp Asp Pro Gln Val
 115 120 125
 Met Glu Asp Lys Ser Asp Arg Pro Val Cys Arg His Phe Ala Lys Lys
 130 135 140
 Gly His Cys Arg Tyr Glu Asp Leu Cys Ala Phe Tyr His Pro Gly Val
 145 150 155 160
 Asn Gly Pro Pro Leu
 165

<210> 348

<211> 141

<212> PRT

<213> Homo sapiens

<400> 348

Met Arg Asp Asn Ile Ile Ile Ser Gly Ser Thr Asp Arg Thr Leu Lys

1 5 10 15

Val Trp Asn Ala Glu Thr Gly Glu Cys Ile His Thr Leu Tyr Gly His

20 25 30

Thr Ser Thr Val Arg Cys Met His Leu His Glu Lys Arg Val Val Ser

35 40 45

Gly Ser Arg Asp Ala Thr Leu Arg Val Trp Asp Ile Glu Thr Gly Gln

50 55 60

Cys Leu His Val Leu Met Gly His Val Ala Ala Val Arg Cys Val Gln

65 70 75 80

Tyr Asp Gly Arg Arg Val Val Ser Gly Ala Tyr Asp Phe Met Val Lys

85 90 95

Ala Trp Asp Pro Glu Thr Glu Thr Cys Leu His Thr Leu Gln Gly His

100 105 110

Thr Asn Arg Val Tyr Ser Leu Gln Val Arg Ser Leu Ile Ser Pro Leu

115 120 125

Asn Ala Leu Leu Met Asn His Lys Val Val Leu Leu Arg

130 135 140

<210> 349

<211> 326

<212> PRT

<213> Homo sapiens

<400> 349

Met Asp Ala Ile Lys Lys Lys Met Gln Met Leu Lys Leu Asp Lys Glu

1 5 10 15

Asn Ala Leu Asp Arg Ala Glu Gln Ala Glu Ala Asp Lys Lys Ala Ala
 20 25 30
 Glu Asp Arg Ser Lys Gln Leu Glu Glu Asp Ile Ala Ala Lys Glu Lys
 35 40 45
 Leu Leu Arg Val Ser Glu Asp Glu Arg Asp Arg Val Leu Glu Glu Leu
 50 55 60
 His Lys Ala Glu Asp Ser Leu Leu Ala Ala Glu Glu Ala Ala Ala Lys
 65 70 75 80
 Leu Glu Asp Glu Leu Val Ser Leu Gln Lys Lys Leu Lys Gly Thr Glu
 85 90 95
 Asp Glu Leu Asp Lys Tyr Ser Glu Ala Leu Lys Asp Ala Gln Glu Lys
 100 105 110
 Leu Glu Leu Ala Glu Lys Lys Ala Thr Asp Ala Glu Ala Asp Val Ala
 115 120 125
 Ser Leu Asn Arg Arg Ile Gln Leu Val Glu Glu Glu Leu Asp Arg Ala
 130 135 140
 Gln Glu Arg Leu Ala Thr Ala Leu Gln Lys Leu Glu Glu Ala Glu Lys
 145 150 155 160
 Ala Ala Asp Glu Ser Glu Arg Gly Met Lys Val Ile Glu Ser Arg Ala
 165 170 175
 Gln Lys Asp Glu Glu Lys Met Glu Ile Gln Glu Ile Gln Leu Lys Glu
 180 185 190
 Ala Lys His Ile Ala Glu Asp Ala Asp Arg Lys Tyr Glu Glu Val Ala
 195 200 205
 Arg Lys Leu Val Ile Ile Glu Ser Asp Leu Glu Arg Ala Glu Glu Arg
 210 215 220
 Ala Glu Leu Ser Glu Gly Lys Cys Ala Glu Leu Glu Glu Glu Leu Lys
 225 230 235 240
 Thr Val Thr Asn Asn Leu Lys Ser Leu Glu Ala Gln Ala Glu Lys Tyr

245 250 255
 Ser Gln Lys Glu Asp Arg Tyr Glu Glu Glu Ile Lys Val Leu Ser Asp
 260 265 270
 Lys Leu Lys Glu Ala Glu Thr Arg Ala Glu Phe Ala Glu Arg Ser Val
 275 280 285
 Thr Lys Leu Glu Lys Ser Ile Asp Asp Leu Glu Glu Lys Val Ala His
 290 295 300
 Ala Lys Glu Glu Asn Leu Ser Met His Gln Met Leu Asp Gln Thr Leu
 305 310 315 320
 Leu Glu Leu Asn Asn Met
 325

<210> 350

<211> 268

<212> PRT

<213> Homo sapiens

<400> 350

Met Ala Ala Ala Thr Gly Ala Val Ala Ala Ser Ala Ala Ser Gly Gln
 1 5 10 15
 Ala Glu Gly Lys Lys Ile Thr Asp Leu Arg Val Ile Asp Leu Lys Ser
 20 25 30
 Glu Leu Lys Arg Arg Asn Leu Asp Ile Thr Gly Val Lys Thr Val Leu
 35 40 45
 Ile Ser Arg Leu Lys Gln Ala Ile Glu Glu Glu Gly Gly Asp Pro Asp
 50 55 60
 Asn Ile Glu Leu Thr Val Ser Thr Gly Thr Pro Asn Lys Lys Pro Thr
 65 70 75 80

Lys Gly Lys Gly Lys Lys His Glu Ala Asp Glu Leu Ser Gly Asp Ala
85 90 95
Ser Val Glu Asp Asp Ala Phe Ile Lys Asp Gly Glu Glu Glu Glu Asn
100 105 110
Glu Lys Gly Ser Leu Ala Glu Ala Asp His Thr Ala His Glu Glu Met
115 120 125
Glu Ala His Thr Thr Val Lys Glu Ala Glu Asp Asp Asn Ile Ser Val
130 135 140
Thr Ile Gln Ala Glu Asp Ala Ile Thr Leu Asp Phe Asp Gly Asp Asp
145 150 155 160
Leu Leu Glu Thr Gly Lys Asn Val Lys Ile Thr Asp Ser Glu Ala Ser
165 170 175
Lys Pro Lys Asp Gly Gln Asp Ala Ile Ala Gln Ser Pro Glu Lys Glu
180 185 190
Ser Lys Asp Tyr Glu Met Asn Ala Asn His Lys Asp Gly Lys Lys Glu
195 200 205
Asp Cys Val Lys Gly Asp Pro Val Glu Lys Glu Ala Arg Glu Ser Ser
210 215 220
Lys Lys Ala Glu Ser Gly Asp Lys Glu Lys Asp Thr Leu Lys Lys Gly
225 230 235 240
Pro Ser Ser Thr Gly Ala Ser Gly Gln Ala Lys Arg Phe Val Phe Leu
245 250 255
Cys Gln Phe Phe Thr Ile Leu Asn Ser Ser Ile Gln
260 265

<210> 351

<211> 105

<212> PRT

<213> Homo sapiens

<400> 351

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Met Thr Thr His Leu Tyr Asp Ala Pro Thr Val Lys Phe Leu Thr Pro
  1             5             10            15
Cys Tyr His Pro Asn Val Asp Thr Gln Gly Asn Ile Cys Leu Asp Ile
          20             25            30
Leu Lys Glu Lys Trp Ser Ala Pro Tyr Asp Ile Arg Thr Ile Leu Leu
          35             40            45
Ser Ile Gln Cys Leu Leu Gly Gln Leu Asn Ile Asp Ser Pro Leu Asn
          50             55            60
Thr His Ala Thr Lys Leu Trp Glu Asn Pro Ile Ala Leu Arg Ser Thr
          65             70            75            80
Cys Lys Gly Gln Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp
          85             90            95
Glu Ala Glu Val Gly Gly Trp Ile Thr
          100            105

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<210> 352

<211> 336

<212> PRT

<213> Homo sapiens

<400> 352

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Met Lys Glu Arg Lys Arg His Leu Gly Asp Thr Lys His Phe Cys Pro
  1             5             10            15
Val Val Leu Lys Glu Asn Phe Ile Leu Gln Pro Gly Asn Thr Glu Glu
          20             25            30

```

Ala Ala Lys Tyr Arg Glu Lys Ile Tyr Tyr Phe Ser Ser Ala Glu Ala
35 40 45
Lys Glu Lys Phe Leu Glu His Pro Glu Asp Tyr Val Ala His Glu Glu
50 55 60
Pro Leu Lys Ala Pro Pro Leu Arg Ile Cys Leu Val Gly Pro Gln Gly
65 70 75 80
Ser Gly Lys Thr Met Cys Gly Arg Gln Leu Ala Glu Lys Leu Asn Ile
85 90 95
Phe His Ile Gln Phe Glu Glu Val Leu Gln Glu Lys Leu Leu Leu Lys
100 105 110
Thr Glu Lys Lys Val Gly Pro Glu Phe Glu Glu Asp Ser Glu Asn Glu
115 120 125
Gln Ala Ala Lys Gln Glu Leu Glu Glu Leu Ala Ile Gln Ala Asn Val
130 135 140
Lys Val Glu Glu Glu Asn Thr Lys Lys Gln Leu Pro Glu Val Gln Leu
145 150 155 160
Thr Glu Glu Glu Glu Val Ile Lys Ser Ser Leu Met Glu Asn Glu Pro
165 170 175
Leu Pro Pro Glu Ile Leu Glu Val Ile Leu Ser Glu Trp Trp Leu Lys
180 185 190
Glu Pro Ile Arg Ser Thr Gly Phe Ile Leu Asp Gly Phe Pro Arg Tyr
195 200 205
Pro Glu Glu Ala Gln Phe Leu Gly Asp Arg Gly Phe Phe Pro Asp Ala
210 215 220
Ala Val Phe Ile Gln Val Asp Asp Gln Asp Ile Phe Asp Arg Leu Leu
225 230 235 240
Pro Ala Gln Ile Glu Lys Trp Lys Leu Lys Gln Lys Lys Lys Leu Glu
245 250 255
Arg Lys Lys Leu Ile Lys Asp Met Lys Ala Lys Ile Arg Val Asp Thr

260	265	270
Ile Ala Lys Arg Arg Ala Glu Leu	Ile Leu Glu Arg Asp Lys Lys Arg	
275	280	285
Arg Glu Val Ser Ser Phe Val Phe Phe Phe Lys Thr Gly Ser His Ser		
290	295	300
Val Ala Gln Gly Arg Val Gln Trp His Asn His Ser Ser Leu Gln Pro		
305	310	315
Arg Thr Pro Gly Leu Lys Gly Ser Ser His Leu Ser Leu Ser Lys Cys		
325	330	335

<210> 353

<211> 438

<212> PRT

<213> Homo sapiens

<400> 353

Met His Pro Leu Pro Gly Tyr Trp Ser Cys Tyr Cys Leu Leu Leu Leu		
1	5	10
Phe Ser Leu Gly Val Gln Gly Ser Leu Gly Ala Pro Ser Ala Ala Pro		
20	25	30
Glu Gln Val His Leu Ser Tyr Pro Gly Glu Pro Gly Ser Met Thr Val		
35	40	45
Thr Trp Thr Thr Trp Val Pro Thr Arg Ser Glu Val Gln Phe Gly Leu		
50	55	60
Gln Pro Ser Gly Pro Leu Pro Leu Arg Ala Gln Gly Thr Phe Val Pro		
65	70	75
Phe Val Asp Gly Gly Ile Leu Arg Arg Lys Leu Tyr Ile His Arg Val		
85	90	95

Thr Leu Arg Lys Leu Leu Pro Gly Val Gln Tyr Val Tyr Arg Cys Gly
100 105 110
Ser Ala Gln Gly Trp Ser Arg Arg Phe Arg Phe Arg Ala Leu Lys Asn
115 120 125
Gly Ala His Trp Ser Pro Arg Leu Ala Val Phe Gly Asp Leu Gly Ala
130 135 140
Asp Asn Pro Lys Ala Val Pro Arg Leu Arg Arg Asp Thr Gln Gln Gly
145 150 155 160
Met Tyr Asp Ala Val Leu His Val Gly Asp Phe Ala Tyr Asn Leu Asp
165 170 175
Gln Asp Asn Ala Arg Val Gly Asp Arg Phe Met Arg Leu Ile Glu Pro
180 185 190
Val Ala Ala Ser Leu Pro Tyr Met Thr Cys Pro Gly Asn His Glu Glu
195 200 205
Arg Tyr Asn Phe Ser Asn Tyr Lys Ala Arg Phe Ser Met Pro Gly Asp
210 215 220
Asn Glu Gly Leu Trp Tyr Ser Trp Asp Leu Gly Pro Ala His Ile Ile
225 230 235 240
Ser Phe Ser Thr Glu Val Tyr Phe Phe Leu His Tyr Gly Arg His Leu
245 250 255
Val Gln Arg Gln Phe Arg Trp Leu Glu Ser Asp Leu Gln Lys Ala Asn
260 265 270
Lys Asn Arg Ala Ala Arg Pro Trp Ile Ile Thr Met Gly His Arg Pro
275 280 285
Met Tyr Cys Ser Asn Ala Asp Leu Asp Asp Cys Thr Arg His Glu Ser
290 295 300
Lys Val Arg Lys Gly Leu Gln Gly Lys Leu Tyr Gly Leu Glu Asp Leu
305 310 315 320
Phe Tyr Lys Tyr Gly Val Asp Leu Gln Leu Trp Ala His Glu His Ser

325 330 335
 Tyr Glu Arg Leu Trp Pro Ile Tyr Asn Tyr Gln Val Phe Asn Gly Ser
 340 345 350
 Arg Glu Met Pro Tyr Thr Asn Pro Arg Gly Pro Val His Ile Ile Thr
 355 360 365
 Gly Ser Ala Gly Cys Glu Glu Arg Leu Thr Pro Phe Ala Val Phe Pro
 370 375 380
 Arg Pro Trp Ser Ala Val Arg Val Lys Glu Tyr Gly Tyr Thr Arg Leu
 385 390 395 400
 His Ile Leu Asn Gly Thr His Thr His Ile Gln Gln Val Ser Asp Asp
 405 410 415
 Gln Asp Gly Lys Ile Val Asp Asp Val Trp Val Val Arg Pro Leu Phe
 420 425 430
 Gly Arg Arg Met Tyr Leu
 435

<210> 354

<211> 607

<212> PRT

<213> Homo sapiens

<400> 354

Met Ala Glu Glu Gly Ala Ile Leu Lys Val Thr Lys Asp Leu Arg Ala
 1 5 10 15
 Ala Val Ser Ala Ile Leu Gln Gly Tyr Gly Asp Gly Gln Gly Pro Val
 20 25 30
 Thr Asp Thr Ser Ala Glu Leu His Arg Leu Cys Gly Cys Leu Glu Leu
 35 40 45

Leu Leu Gln Phe Asp Gln Lys Glu Gln Lys Ser Phe Leu Gly Pro Arg
 50 55 60
 Lys Asp Tyr Trp Asp Phe Leu Cys Thr Ala Leu Arg Arg Gln Arg Gly
 65 70 75 80
 Asn Met Glu Pro Ile His Phe Val Arg Ser Gln Asp Lys Leu Lys Thr
 85 90 95
 Pro Leu Gly Lys Gly Arg Ala Phe Ile Arg Phe Cys Leu Ala Arg Gly
 100 105 110
 Gln Leu Ala Glu Ala Leu Gln Leu Cys Leu Leu Asn Ser Glu Leu Thr
 115 120 125
 Arg Glu Trp Tyr Gly Pro Arg Ser Pro Leu Leu Cys Pro Glu Arg Gln
 130 135 140
 Glu Asp Ile Leu Asp Ser Leu Tyr Ala Leu Asn Gly Val Ala Phe Glu
 145 150 155 160
 Leu Asp Leu Gln Gln Pro Asp Leu Asp Gly Ala Trp Pro Met Phe Ser
 165 170 175
 Glu Ser Arg Cys Ser Ser Ser Thr Gln Thr Gln Gly Arg Arg Pro Arg
 180 185 190
 Lys Asn Lys Asp Ala Pro Lys Lys Val Pro Leu Pro Cys Leu His Ser
 195 200 205
 Glu Leu Pro Leu Pro His Leu Leu Gly Ile Leu Lys Ile Pro Ala Ala
 210 215 220
 Tyr Gly Gly Pro Glu Asn Val Gln Ile Glu Asp Ser His Thr Ser Gln
 225 230 235 240
 Ala Ile Cys Leu Gln Asp Ala Pro Ser Gly Gln Gln Leu Ala Gly Leu
 245 250 255
 Pro Arg Ser Gln Gln Gln Arg His Leu Pro Phe Phe Leu Glu Lys Lys
 260 265 270
 Gly Glu Ser Ser Arg Lys His Arg Tyr Pro Gln Ser Met Trp Glu Pro

275	280	285
Glu Gly Lys Glu Leu Gln Leu Asp Gln Glu Glu Arg Ala Pro Trp Ile		
290	295	300
Glu Ile Phe Leu Gly Asn Ser Thr Pro Ser Thr Gln Gly Gln Gly Lys		
305	310	315
Gly Ala Met Gly Thr Gln Lys Glu Val Ile Gly Met Glu Ala Glu Val		
325	330	335
Thr Gly Val Leu Leu Val Ala Glu Gly Gln Arg Thr Thr Glu Gly Thr		
340	345	350
His Lys Lys Glu Ala Glu Trp Ser His Val Gln Arg Leu Leu Met Pro		
355	360	365
Ser Pro Arg Gly Ala Val Glu Gly Ala Val Ser Gly Ser Arg Gln Gly		
370	375	380
Ser Gly Gly Ser Ser Ile Leu Gly Glu Pro Trp Val Leu Gln Gly His		
385	390	395
Ala Thr Lys Glu Asp Ser Thr Val Glu Asn Pro Gln Val Gln Thr Glu		
405	410	415
Val Thr Leu Val Ala Arg Arg Glu Glu Gln Ala Glu Val Ser Leu Gln		
420	425	430
Asp Glu Ile Lys Ser Leu Arg Leu Gly Leu Arg Lys Ala Glu Glu Gln		
435	440	445
Ala Gln Arg Gln Glu Gln Leu Leu Arg Glu Gln Glu Gly Glu Leu Gln		
450	455	460
Ala Leu Arg Glu Gln Leu Ser Arg Cys Gln Glu Glu Arg Ala Glu Leu		
465	470	475
Gln Ala Gln Leu Glu Gln Lys Gln Gln Glu Ala Glu Arg Arg Asp Ala		
485	490	495
Met Tyr Gln Glu Glu Leu Gly Gly Gln Arg Asp Leu Val Gln Ala Met		
500	505	510

Lys Arg Arg Val Leu Glu Leu Ile Gln Glu Lys Asp Arg Leu Trp Gln
 515 520 525
 Arg Leu Gln His Leu Ser Ser Met Ala Pro Glu Cys Cys Val Ala Cys
 530 535 540
 Ser Lys Ile Phe Gly Arg Phe Ser Arg Arg Tyr Pro Cys Ser Ala Arg
 545 550 555 560
 Thr Ser Leu Gly Arg Glu Glu Ser Glu Pro Pro Gly Glu Ala Ala Met
 565 570 575
 Trp Arg Trp Arg Leu Trp Arg Gly Arg Ala Ser Gly His Pro Ser Gly
 580 585 590
 Glu Gly Arg Pro Pro Glu Thr Asn Gln Gly His Ser Thr Gly Arg
 595 600 605

<210> 355

<211> 148

<212> PRT

<213> Homo sapiens

<400> 355

Met Ser Cys Asn Leu Ala Ser Leu Cys Ser Lys Val Leu Glu Gln Gly
 1 5 10 15
 Ala Tyr His Pro Ile Leu Ile Pro Ser Pro Leu Ser Pro Pro Trp Thr
 20 25 30
 His Cys Ala Gln His Leu Arg Pro Cys Thr Cys Lys Gly Ser Ser His
 35 40 45
 Tyr Gly Asp Gln Gln Pro Arg Ser Gln Val Leu Asn Ser Lys Met Leu
 50 55 60
 Leu Ser Ala Ser Val Leu Asp Leu Ser Ser Val Asp Ser Asp Ala Phe

65 70 75 80
 Glu Ile Leu Leu Ser Leu Ala Ser Ile Ala Ile Arg Thr Pro Arg Val
 85 90 95
 Cys His Pro Leu Leu Pro Leu His Phe Ile Leu Leu His Lys Gly Gln
 100 105 110
 Pro Ser His Val Glu Val Leu Trp Asp Ala Ala Trp Leu Phe Phe Ile
 115 120 125
 Val Asp Leu Met Phe Ser Ser Ile Leu Leu Cys Thr Phe Leu Arg Leu
 130 135 140
 Gln Tyr Phe Val
 145

<210> 356

<211> 392

<212> PRT

<213> Homo sapiens

<400> 356

Met Gln Pro Leu Thr Lys Asp Ala Gly Met Ser Leu Ser Ser Val Thr
 1 5 10 15
 Leu Ala Ser Ala Leu Gln Val Arg Gly Glu Ala Leu Ser Glu Glu Glu
 20 25 30
 Ile Trp Ser Leu Leu Phe Leu Ala Ala Glu Gln Leu Leu Glu Asp Leu
 35 40 45
 Arg Asn Asp Ser Ser Asp Tyr Val Val Cys Pro Trp Ser Ala Leu Leu
 50 55 60
 Ser Ala Ala Gly Ser Leu Ser Phe Gln Gly Arg Val Ser His Ile Glu
 65 70 75 80

Ala Ala Pro Phe Lys Ala Pro Glu Leu Leu Gln Gly Gln Ser Glu Asp
 85 90 95
 Glu Gln Pro Asp Ala Ser Gln Met His Val Tyr Ser Leu Gly Met Thr
 100 105 110
 Leu Tyr Trp Ser Ala Gly Phe His Val Pro Pro His Gln Pro Leu Gln
 115 120 125
 Leu Cys Glu Pro Leu His Ser Ile Leu Leu Thr Met Cys Glu Asp Gln
 130 135 140
 Pro His Arg Arg Cys Thr Leu Gln Ser Val Leu Glu Ala Cys Arg Val
 145 150 155 160
 His Glu Lys Glu Val Ser Val Tyr Pro Ala Pro Ala Gly Leu His Ile
 165 170 175
 Arg Arg Leu Val Gly Leu Val Leu Gly Thr Ile Ser Glu Val Glu Lys
 180 185 190
 Arg Val Val Glu Glu Ser Ser Ser Val Gln Gln Asn Arg Ser Tyr Leu
 195 200 205
 Leu Arg Lys Arg Leu Arg Gly Thr Ser Ser Glu Ser Pro Ala Ala Gln
 210 215 220
 Ala Pro Glu Cys Leu His Pro Cys Arg Val Ser Glu Arg Ser Thr Glu
 225 230 235 240
 Thr Gln Ser Ser Pro Glu Pro His Trp Ser Thr Leu Thr His Ser His
 245 250 255
 Cys Ser Leu Leu Val Asn Arg Ala Leu Pro Gly Ala Asp Pro Gln Asp
 260 265 270
 Gln Gln Ala Gly Arg Arg Leu Ser Ser Gly Ser Val His Ser Ala Ala
 275 280 285
 Asp Ser Ser Trp Pro Thr Thr Pro Ser Gln Arg Gly Phe Leu Gln Arg
 290 295 300
 Arg Ser Lys Phe Ser Arg Pro Glu Phe Ile Leu Leu Ala Gly Glu Ala

305 310 315 320
 Pro Met Thr Leu His Leu Pro Gly Ser Val Val Thr Lys Lys Gly Lys
 325 330 335
 Ser Tyr Leu Ala Leu Arg Asp Leu Cys Val Val Leu Leu Asn Gly Gln
 340 345 350
 His Leu Glu Val Lys Cys Asp Val Glu Ser Thr Val Gly Ala Val Phe
 355 360 365
 Asn Ala Val Thr Ser Phe Ala Asn Leu Glu Glu Leu Thr Tyr Phe Gly
 370 375 380
 Leu Ala Tyr Met Lys Ser Gly Glu
 385 390

<210> 357

<211> 357

<212> PRT

<213> Homo sapiens

<400> 357

Met Pro Glu Cys Trp Asp Gly Glu His Asp Ile Glu Thr Pro Tyr Gly
 1 5 10 15
 Leu Leu His Val Val Ile Arg Gly Ser Pro Lys Gly Asn Arg Pro Ala
 20 25 30
 Ile Leu Thr Tyr His Asp Val Gly Leu Asn Arg Lys Cys Ser Pro Ala
 35 40 45
 Ser Val Ser Pro Pro Leu Pro Pro Ile Ser Gln Ser Asp Lys Leu Cys
 50 55 60
 Phe Asn Thr Phe Phe Asn Phe Glu Asp Met Gln Glu Ile Thr Lys His
 65 70 75 80

Phe Val Val Cys His Val Asp Ala Pro Gly Gln Gln Val Gly Ala Ser
 85 90 95
 Gln Phe Pro Gln Gly Tyr Gln Phe Pro Ser Met Glu Gln Leu Ala Ala
 100 105 110
 Met Leu Pro Ser Val Val Gln His Phe Gly Phe Lys Tyr Val Ile Gly
 115 120 125
 Ile Gly Val Gly Ala Gly Ala Tyr Val Leu Ala Lys Phe Ala Leu Ile
 130 135 140
 Phe Pro Asp Leu Val Glu Gly Leu Val Leu Val Asn Ile Asp Pro Asn
 145 150 155 160
 Gly Lys Gly Trp Ile Asp Trp Ala Ala Thr Lys Leu Ser Gly Leu Thr
 165 170 175
 Ser Thr Leu Pro Asp Thr Val Leu Ser His Leu Phe Ser Gln Glu Glu
 180 185 190
 Leu Val Asn Asn Thr Glu Leu Val Gln Ser Tyr Arg Gln Gln Ile Gly
 195 200 205
 Asn Val Val Asn Gln Ala Asn Leu Gln Leu Phe Trp Asn Met Tyr Asn
 210 215 220
 Ser Arg Arg Asp Leu Asp Ile Asn Arg Pro Gly Thr Val Pro Asn Ala
 225 230 235 240
 Lys Thr Leu Arg Cys Pro Val Met Leu Val Val Gly Asp Asn Ala Pro
 245 250 255
 Ala Glu Asp Gly Val Val Glu Cys Asn Ser Lys Leu Asp Pro Thr Thr
 260 265 270
 Thr Thr Phe Leu Lys Met Ala Asp Ser Gly Gly Leu Pro Gln Val Thr
 275 280 285
 Gln Pro Gly Lys Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met
 290 295 300
 Gly Tyr Met Pro Ser Ala Ser Met Thr Arg Leu Ala Arg Ser Arg Thr

305 310 315 320
 Ala Ser Leu Thr Ser Ala Ser Ser Val Asp Gly Ser Arg Pro Gln Ala
 325 330 335
 Cys Thr His Ser Glu Ser Ser Glu Gly Leu Gly Gln Val Asn His Thr
 340 345 350
 Met Glu Val Ser Cys
 355

<210> 358

<211> 357

<212> PRT

<213> Homo sapiens

<400> 358

Met Ser Pro Gly Pro Thr Asn Phe Phe Val Phe Leu Leu Glu Met Gly
 1 5 10 15
 Phe His His Ala Gly Arg Val Gly Pro Glu Leu Leu Thr Ser Gly Asp
 20 25 30
 Pro Leu Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Glu Thr Glu Gly
 35 40 45
 Ser Glu Glu Asp Asp Lys Glu Asn Asp Lys Thr Glu Glu Met Pro Asn
 50 55 60
 Asp Ser Val Leu Glu Asn Lys Ser Leu Gln Glu Asn Glu Glu Glu Glu
 65 70 75 80
 Ile Gly Asn Leu Glu Leu Ala Trp Asp Met Pro Asp Leu Ala Lys Ile
 85 90 95
 Ile Phe Lys Arg Gln Glu Thr Lys Glu Ala Gln Leu Tyr Ala Ala Gln
 100 105 110

Ala His Leu Lys Leu Gly Glu Val Ser Val Glu Ser Glu Asn Tyr Val
115 120 125
Gln Ala Val Glu Glu Phe Gln Ser Cys Leu Asn Leu Gln Glu Gln Tyr
130 135 140
Leu Glu Ala His Asp Arg Leu Leu Ala Glu Thr His Tyr Gln Leu Gly
145 150 155 160
Leu Ala Tyr Gly Tyr Asn Ser Gln Tyr Asp Glu Ala Val Ala Gln Phe
165 170 175
Ser Lys Ser Ile Glu Val Ile Glu Asn Arg Met Ala Val Leu Asn Glu
180 185 190
Gln Val Lys Glu Ala Glu Gly Ser Ser Ala Glu Tyr Lys Lys Glu Ile
195 200 205
Glu Glu Leu Lys Glu Leu Leu Pro Glu Ile Arg Glu Lys Ile Glu Asp
210 215 220
Ala Lys Glu Ser Gln Arg Ser Gly Asn Val Ala Glu Leu Ala Leu Lys
225 230 235 240
Ala Thr Leu Val Glu Ser Ser Thr Ser Gly Phe Thr Pro Gly Gly Gly
245 250 255
Gly Ser Ser Val Ser Met Ile Ala Ser Arg Lys Pro Thr Asp Gly Ala
260 265 270
Ser Ser Ser Asn Cys Val Thr Asp Ile Ser His Leu Val Arg Lys Lys
275 280 285
Arg Lys Pro Glu Glu Glu Ser Pro Arg Lys Asp Asp Ala Lys Lys Ala
290 295 300
Lys Gln Glu Pro Glu Val Asn Gly Gly Ser Gly Asp Ala Val Pro Ser
305 310 315 320
Gly Asn Glu Val Ser Glu Asn Met Glu Glu Glu Ala Glu Asn Gln Ala
325 330 335
Glu Ser Arg Ala Ala Val Glu Gly Thr Val Glu Ala Gly Ala Thr Val

340 345 350
Glu Ser Thr Ala Cys
355

<210> 359

<211> 217

<212> PRT

<213> Homo sapiens

<400> 359

Met Leu Ser Leu Gln Asp Ser Val Phe Phe Glu Ile Ser Ile Lys Ser
1 5 10 15
Leu Leu Lys Ser Trp Ser Ser Ser Ser Ser Ala Pro Val Ser Lys Val
20 25 30
Asn Lys Tyr Cys Ala Ser Ser Asn Phe His Ser Thr Trp Gly Lys Lys
35 40 45
Asn Ile Ile Met Ser Asn Ile Thr Ile Asp Pro Asp Val Lys Pro Gly
50 55 60
Glu Tyr Val Ile Lys Ser Leu Phe Ala Glu Phe Ala Val Gln Ala Glu
65 70 75 80
Lys Lys Ile Glu Val Val Met Ala Glu Pro Leu Glu Lys Leu Leu Ser
85 90 95
Arg Ser Leu Gln Arg Gly Glu Asp Leu Gln Phe Asp Gln Leu Ile Ser
100 105 110
Ser Met Ser Ser Val Ala Glu His Cys Leu Pro Ser Leu Leu Arg Thr
115 120 125
Leu Phe Asp Trp Tyr Arg Arg Gln Asn Gly Thr Glu Asp Glu Ser Tyr
130 135 140

Glu Tyr Arg Pro Arg Ser Ser Thr Lys Ser Lys Gly Asp Glu Gln Gln
 145 150 155 160
 Arg Glu Arg Asp Tyr Leu Leu Glu Arg Arg Asp Leu Ala Val Asp Phe
 165 170 175
 Ile Phe Cys Leu Val Leu Val Glu Val Leu Lys Gln Val Ser Ser Phe
 180 185 190
 Ile Ser Ala Lys Ser Val Phe Leu Ile Leu Cys Leu Leu Cys Leu Arg
 195 200 205
 Val Ser Val Thr Leu Arg Cys Cys Val
 210 215

<210> 360

<211> 908

<212> PRT

<213> Homo sapiens

<400> 360

Met Gly Val Asn Asp Leu Trp Gln Ile Leu Glu Pro Val Lys Gln His
 1 5 10 15
 Ile Pro Leu Arg Asn Leu Gly Gly Lys Thr Ile Ala Val Asp Leu Ser
 20 25 30
 Leu Trp Val Cys Glu Ala Gln Thr Val Lys Lys Met Met Gly Ser Val
 35 40 45
 Met Lys Pro His Leu Arg Asn Leu Phe Phe Arg Ile Ser Tyr Leu Thr
 50 55 60
 Gln Met Asp Val Lys Leu Val Phe Val Met Glu Gly Glu Pro Pro Lys
 65 70 75 80
 Leu Lys Ala Asp Val Ile Ser Lys Arg Asn Gln Thr Arg Tyr Gly Ser

	85		90		95
Ser Gly Lys Ser Trp Ser Gln Lys Thr Gly Arg Ser His Phe Lys Ser					
	100		105		110
Val Leu Arg Glu Cys Leu His Met Leu Glu Cys Leu Gly Ile Pro Trp					
	115		120		125
Val Gln Ala Ala Gly Glu Ala Glu Ala Met Cys Ala Tyr Leu Asn Ala					
	130		135		140
Gly Gly His Val Asp Gly Cys Leu Thr Asn Asp Gly Asp Thr Phe Leu					
145		150		155	160
Tyr Gly Ala Gln Thr Val Tyr Arg Asn Phe Thr Met Asn Thr Lys Asp					
	165		170		175
Pro His Val Asp Cys Tyr Thr Met Ser Ser Ile Lys Ser Lys Leu Gly					
	180		185		190
Leu Asp Arg Asp Ala Leu Val Gly Leu Ala Ile Leu Leu Gly Cys Asp					
	195		200		205
Tyr Leu Pro Lys Gly Val Pro Gly Val Gly Lys Glu Gln Ala Leu Lys					
	210		215		220
Leu Ile Gln Ile Leu Lys Gly Gln Ser Leu Leu Gln Arg Phe Asn Arg					
225		230		235	240
Trp Asn Glu Thr Ser Cys Asn Ser Ser Pro Gln Leu Leu Val Thr Lys					
	245		250		255
Lys Leu Ala His Cys Ser Val Cys Ser His Pro Gly Ser Pro Lys Asp					
	260		265		270
His Glu Arg Asn Gly Cys Arg Leu Cys Lys Ser Asp Lys Tyr Cys Glu					
	275		280		285
Pro His Asp Tyr Glu Tyr Cys Cys Pro Cys Glu Trp His Arg Thr Glu					
	290		295		300
His Asp Arg Gln Leu Asn Glu Val Glu Asn Asn Ile Lys Lys Lys Ala					
305		310		315	320

Cys Cys Cys Glu Gly Phe Pro Phe His Glu Val Ile Gln Glu Phe Leu
325 330 335
Leu Asn Lys Asp Lys Leu Val Lys Val Ile Arg Tyr Gln Arg Pro Asp
340 345 350
Leu Leu Leu Phe Gln Arg Phe Thr Leu Glu Lys Met Glu Trp Pro Asn
355 360 365
His Tyr Ala Cys Glu Lys Leu Leu Val Leu Leu Thr His Tyr Asp Met
370 375 380
Ile Glu Arg Lys Leu Gly Ser Arg Asn Ser Asn Gln Leu Gln Pro Ile
385 390 395 400
Arg Ile Val Lys Thr Arg Ile Arg Asn Gly Val His Cys Phe Glu Ile
405 410 415
Glu Trp Glu Lys Pro Glu His Tyr Ala Met Glu Asp Lys Gln His Gly
420 425 430
Glu Phe Ala Leu Leu Thr Ile Glu Glu Glu Ser Leu Phe Glu Ala Ala
435 440 445
Tyr Pro Glu Ile Val Ala Val Tyr Gln Lys Gln Lys Leu Glu Ile Lys
450 455 460
Gly Lys Lys Gln Lys Arg Ile Lys Pro Lys Glu Asn Asn Leu Pro Glu
465 470 475 480
Pro Asp Glu Val Met Ser Phe Gln Ser His Met Thr Leu Lys Pro Thr
485 490 495
Cys Glu Ile Phe His Lys Gln Asn Ser Lys Leu Asn Ser Gly Ile Ser
500 505 510
Pro Asp Pro Thr Leu Pro Gln Glu Ser Ile Ser Ala Ser Leu Asn Ser
515 520 525
Leu Leu Leu Pro Lys Asn Thr Pro Cys Leu Asn Ala Gln Glu Gln Phe
530 535 540
Met Ser Ser Leu Arg Pro Leu Ala Ile Gln Gln Ile Lys Ala Val Ser

545 550 555 560
Lys Ser Leu Ile Ser Glu Ser Ser Gln Pro Asn Thr Ser Ser His Asn
 565 570 575
Ile Ser Val Ile Ala Asp Leu His Leu Ser Thr Ile Asp Trp Glu Gly
 580 585 590
Thr Ser Phe Ser Asn Ser Pro Ala Ile Gln Arg Asn Thr Phe Ser His
 595 600 605
Asp Leu Lys Ser Glu Val Glu Ser Glu Leu Ser Ala Ile Pro Asp Gly
 610 615 620
Phe Glu Asn Ile Pro Glu Gln Leu Ser Cys Glu Ser Glu Arg Tyr Thr
625 630 635 640
Ala Asn Ile Lys Lys Val Leu Asp Glu Asp Ser Asp Gly Ile Ser Pro
 645 650 655
Glu Glu His Leu Leu Ser Gly Ile Thr Asp Leu Cys Leu Gln Asp Leu
 660 665 670
Pro Leu Lys Glu Arg Ile Phe Ile Lys Leu Ser Tyr Pro Gln Asp Asn
 675 680 685
Leu Gln Pro Asp Val Asn Leu Lys Thr Leu Ser Ile Leu Ser Val Lys
 690 695 700
Glu Ser Cys Ile Ala Asn Ser Gly Ser Asp Cys Thr Ser His Leu Ser
705 710 715 720
Lys Asp Leu Pro Gly Ile Pro Leu Gln Asn Glu Ser Arg Asp Ser Lys
 725 730 735
Ile Leu Lys Gly Asp Gln Leu Leu Gln Glu Asp Tyr Lys Val Asn Thr
 740 745 750
Ser Val Pro Tyr Ser Val Ser Asn Thr Val Val Lys Thr Cys Asn Val
 755 760 765
Arg Pro Pro Asn Thr Ala Leu Asp His Ser Arg Lys Val Asp Met Gln
 770 775 780

Thr Thr Arg Lys Ile Leu Met Lys Lys Ser Val Cys Leu Asp Arg His
 785 790 795 800
 Ser Ser Asp Glu Gln Ser Ala Pro Val Phe Gly Lys Ala Lys Tyr Thr
 805 810 815
 Thr Gln Arg Met Lys His Ser Ser Gln Lys His Asn Ser Ser His Phe
 820 825 830
 Lys Glu Ser Gly His Asn Lys Leu Ser Ser Pro Lys Ile His Ile Lys
 835 840 845
 Glu Thr Glu Gln Cys Val Arg Ser Tyr Glu Thr Ala Glu Asn Glu Glu
 850 855 860
 Ser Cys Phe Pro Asp Ser Thr Lys Ser Ser Leu Ser Ser Leu Gln Cys
 865 870 875 880
 His Lys Lys Glu Asn Asn Ser Gly Thr Cys Leu Asp Ser Pro Leu Pro
 885 890 895
 Leu Cys Gln Arg Leu Lys Leu Arg Phe Gln Ser Thr
 900 905

<210> 361

<211> 637

<212> PRT

<213> Homo sapiens

<400> 361

Met Leu Pro Asn Phe Lys Leu Tyr Asn Phe Ile Glu Ile Phe Phe Lys
 1 5 10 15
 Pro Leu Thr Pro Ser Lys Asn Arg Phe His Phe Val Ser Tyr Phe Glu
 20 25 30
 Asn Val Asn Phe Met Leu Cys Trp Leu Gln Glu Asn Asn Phe Cys Leu

35	40	45
Leu Leu Cys Phe Leu Ser Gly	Leu Leu Ser Arg His Lys Thr Lys Lys	
50	55	60
Leu Ser Ser Glu Lys Asp Ile His Glu Ile Ser Leu Ser Lys Glu Ser		
65	70	75
Ile Ile Glu Lys Ser Lys Thr Leu Arg Leu Lys Gly Ser Ile Phe Arg		
85	90	95
Asn Glu Trp Gln Asn Lys Ser Glu Phe Glu Gly Gln Gln Gly Leu Lys		
100	105	110
Glu Arg Ser Ile Ser Gln Lys Lys Ile Val Ser Lys Lys Met Ser Thr		
115	120	125
Asp Arg Lys Arg Pro Ser Phe Thr Leu Asn Gln Arg Ile His Asn Ser		
130	135	140
Glu Lys Ser Cys Asp Ser His Leu Val Gln His Gly Lys Ile Asp Ser		
145	150	155
Asp Val Lys His Asp Cys Lys Glu Cys Gly Ser Thr Phe Asn Asn Val		
165	170	175
Tyr Gln Leu Thr Leu His Gln Lys Ile His Thr Gly Glu Lys Ser Cys		
180	185	190
Lys Cys Glu Lys Cys Gly Lys Val Phe Ser His Ser Tyr Gln Leu Thr		
195	200	205
Leu His Gln Arg Phe His Thr Gly Glu Lys Pro Tyr Glu Cys Gln Glu		
210	215	220
Cys Gly Lys Thr Phe Thr Leu Tyr Pro Gln Leu Asn Arg His Gln Lys		
225	230	235
Ile His Thr Gly Lys Lys Pro Tyr Met Cys Lys Lys Cys Asp Lys Gly		
245	250	255
Phe Phe Ser Arg Leu Glu Leu Thr Gln His Lys Arg Ile His Thr Gly		
260	265	270

Lys Lys Ser Tyr Glu Cys Lys Glu Cys Gly Lys Val Phe Gln Leu Ile
275 280 285
Phe Tyr Phe Lys Glu His Glu Arg Ile His Thr Gly Lys Lys Pro Tyr
290 295 300
Glu Cys Lys Glu Cys Gly Lys Ala Phe Ser Val Cys Gly Gln Leu Thr
305 310 315 320
Arg His Gln Lys Ile His Thr Gly Val Lys Pro Tyr Glu Cys Lys Glu
325 330 335
Cys Gly Lys Thr Phe Arg Leu Ser Phe Tyr Leu Thr Glu His Arg Arg
340 345 350
Thr His Ala Gly Lys Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ser
355 360 365
Phe Asn Val Arg Gly Gln Leu Asn Arg His Lys Thr Ile His Thr Gly
370 375 380
Ile Lys Pro Phe Ala Cys Lys Val Cys Glu Lys Ala Phe Ser Tyr Ser
385 390 395 400
Gly Asp Leu Arg Val His Ser Arg Ile His Thr Gly Glu Lys Pro Tyr
405 410 415
Glu Cys Lys Glu Cys Gly Lys Ala Phe Met Leu Arg Ser Val Leu Thr
420 425 430
Glu His Gln Arg Leu His Thr Gly Val Lys Pro Tyr Glu Cys Lys Glu
435 440 445
Cys Gly Lys Thr Phe Arg Val Arg Ser Gln Ile Ser Leu His Lys Lys
450 455 460
Ile His Thr Asp Val Lys Pro Tyr Lys Cys Val Arg Cys Gly Lys Thr
465 470 475 480
Phe Arg Phe Gly Phe Tyr Leu Thr Glu His Gln Arg Ile His Thr Gly
485 490 495
Glu Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Ala Phe Ile Arg Arg

500 505 510
Gly Asn Leu Lys Glu His Leu Lys Ile His Ser Gly Leu Lys Pro Tyr
515 520 525
Asp Cys Lys Glu Cys Gly Lys Ser Phe Ser Arg Arg Gly Gln Phe Thr
530 535 540
Glu His Gln Lys Ile His Thr Gly Val Lys Pro Tyr Lys Cys Lys Glu
545 550 555 560
Cys Gly Lys Ala Phe Ser Arg Ser Val Asp Leu Arg Ile His Gln Arg
565 570 575
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Gln Cys Gly Lys Ala
580 585 590
Phe Arg Leu Asn Ser His Leu Thr Glu His Gln Arg Ile His Thr Gly
595 600 605
Glu Lys Pro Tyr Glu Cys Lys Val Cys Arg Lys Ala Phe Arg Gln Tyr
610 615 620
Ser His Leu Tyr Gln His Gln Lys Thr His Asn Val Ile
625 630 635

<210> 362

<211> 170

<212> PRT

<213> Homo sapiens

<400> 362

Met Arg Ala Ala Val Pro His Gln Gly Ile Lys Phe Phe Lys Thr Leu
1 5 10 15
Val Pro Tyr Asp Glu Gly Ala Pro Ala Phe Glu Gly Arg Ala Pro Ala
20 25 30

Phe Ser His Ala Ser Leu His Pro Arg Tyr Asp Leu Met Tyr Gln Cys
 35 40 45
 Trp Ser Ala Asp Pro Lys Gln Arg Pro Ser Phe Thr Cys Leu Arg Met
 50 55 60
 Glu Leu Glu Asn Ile Leu Gly Gln Leu Ser Val Leu Ser Ala Ser Gln
 65 70 75 80
 Asp Pro Leu Tyr Ile Asn Ile Glu Arg Ala Glu Glu Pro Thr Ala Gly
 85 90 95
 Gly Ser Leu Glu Leu Pro Gly Arg Asp Gln Pro Tyr Ser Gly Ala Gly
 100 105 110
 Asp Gly Ser Gly Met Gly Ala Val Gly Gly Thr Pro Ser Asp Cys Arg
 115 120 125
 Tyr Ile Leu Thr Pro Gly Gly Leu Ala Glu Gln Pro Gly Gln Ala Glu
 130 135 140
 His Gln Pro Glu Ser Pro Leu Asn Glu Thr Gln Arg Leu Leu Leu Leu
 145 150 155 160
 Gln Gln Gly Leu Leu Pro His Ser Ser Cys
 165 170

<210> 363

<211> 492

<212> PRT

<213> Homo sapiens

<400> 363

Met Ala Ser Pro Ser Gly Lys Gly Ala Arg Ala Leu Glu Ala Pro Gly
 1 5 10 15
 Cys Gly Pro Arg Pro Leu Ala Arg Asp Leu Val Asp Ser Val Asp Asp

20	25	30
Ala Glu Gly Leu Tyr Val	Ala Val Glu Arg Cys Pro	Leu Cys Asn Thr
35	40	45
Thr Arg Arg Arg Leu Thr	Cys Ala Lys Cys Val	Gln Ser Gly Asp Phe
50	55	60
Val Tyr Phe Asp Gly Arg	Asp Arg Glu Arg Phe	Ile Asp Lys Lys Glu
65	70	75
Arg Leu Ser Arg Leu Lys	Ser Lys Gln Glu Glu Phe	Gln Lys Glu Val
85	90	95
Leu Lys Ala Met Glu Gly	Lys Trp Ile Thr Asp	Gln Leu Arg Trp Lys
100	105	110
Ile Met Ser Cys Lys Met	Arg Ile Glu Gln Leu Lys	Gln Thr Ile Cys
115	120	125
Lys Gly Asn Glu Glu Met	Glu Lys Asn Ser Glu Gly	Leu Leu Lys Thr
130	135	140
Lys Glu Lys Asn Gln Lys	Leu Tyr Ser Arg Ala	Gln Arg His Gln Glu
145	150	155
Lys Lys Glu Lys Ile Gln	Arg His Asn Arg Lys	Leu Gly Asp Leu Val
165	170	175
Glu Lys Lys Thr Ile Asp	Leu Arg Ser His Tyr	Glu Arg Leu Ala Asn
180	185	190
Leu Arg Arg Ser His Ile	Leu Glu Leu Thr Ser	Val Ile Phe Pro Ile
195	200	205
Glu Glu Val Lys Thr Gly	Val Arg Asp Pro Ala	Asp Val Ser Ser Glu
210	215	220
Ser Asp Ser Ala Met Thr	Ser Ser Thr Val Ser	Lys Leu Ala Glu Ala
225	230	235
Arg Arg Thr Thr Tyr Leu	Ser Gly Arg Trp Val	Cys Asp Asp His Asn
245	250	255

Gly Asp Thr Ser Ile Ser Ile Thr Gly Pro Trp Ile Ser Leu Pro Asn
 260 265 270
 Asn Gly Asp Tyr Ser Ala Tyr Tyr Ser Trp Val Glu Glu Lys Lys Thr
 275 280 285
 Thr Gln Gly Pro Asp Met Glu Gln Ser Asn Pro Ala Tyr Thr Ile Ser
 290 295 300
 Ala Ala Leu Cys Tyr Ala Thr Gln Leu Val Asn Ile Leu Ser His Ile
 305 310 315 320
 Leu Asp Val Asn Leu Pro Lys Lys Leu Cys Asn Ser Glu Phe Cys Gly
 325 330 335
 Glu Asn Leu Ser Lys Gln Lys Phe Thr Arg Ala Val Lys Lys Leu Asn
 340 345 350
 Ala Asn Ile Leu Tyr Leu Cys Phe Ser Gln His Val Asn Leu Asp Gln
 355 360 365
 Leu Gln Pro Leu His Thr Leu Arg Asn Leu Met Tyr Leu Val Ser Pro
 370 375 380
 Ser Ser Glu His Leu Gly Arg Ser Gly Pro Phe Glu Val Arg Ala Asp
 385 390 395 400
 Leu Glu Glu Ser Met Glu Phe Val Asp Pro Gly Val Ala Gly Glu Ser
 405 410 415
 Asp Glu Ser Gly Asp Glu Arg Val Ser Asp Glu Glu Thr Asp Leu Gly
 420 425 430
 Thr Asp Trp Glu Asn Leu Pro Ser Pro Arg Phe Cys Asp Ile Pro Ser
 435 440 445
 Gln Ser Val Glu Val Ser Gln Ser Gln Ser Thr Gln Ala Ser Pro Pro
 450 455 460
 Ile Ala Ser Ser Ser Ala Gly Gly Met Ile Ser Ser Ala Ala Ala Ser
 465 470 475 480
 Val Thr Ser Trp Phe Lys Ala Tyr Thr Gly His Arg

485

490

<210> 364

<211> 415

<212> PRT

<213> Homo sapiens

<400> 364

Met	Leu	Ser	Met	Thr	Tyr	Ser	Glu	Ser	Leu	Arg	Ser	Val	Ser	Ser	Arg
1				5					10					15	
Cys	His	Ser	Glu	Trp	Ala	Leu	His	Pro	Val	Arg	Gln	Thr	Asp	Thr	Leu
			20					25				30			
Glu	Leu	Gln	Arg	Leu	Arg	Glu	Val	Arg	Ala	Ala	Ala	Gln	Ala	Arg	Asn
		35				40						45			
Met	Glu	Ser	Phe	Leu	Arg	Met	His	Gly	Leu	Ser	Leu	Asp	Gly	Cys	Thr
	50					55					60				
Ala	Gln	Arg	Thr	Gly	Met	Lys	Tyr	Arg	Asn	Leu	Gly	Lys	Ser	Gly	Leu
	65				70					75				80	
Arg	Val	Ser	Cys	Leu	Gly	Leu	Gly	Thr	Trp	Val	Thr	Phe	Gly	Gly	Gln
			85					90					95		
Ile	Thr	Asp	Glu	Met	Ala	Glu	Gln	Leu	Met	Thr	Leu	Ala	Tyr	Asp	Asn
		100						105					110		
Gly	Ile	Asn	Leu	Phe	Asp	Thr	Ala	Glu	Val	Tyr	Ala	Ala	Gly	Lys	Ala
		115						120					125		
Glu	Val	Val	Leu	Gly	Asn	Ile	Ile	Lys	Lys	Lys	Gly	Trp	Arg	Arg	Ser
	130					135					140				
Ser	Leu	Val	Ile	Thr	Thr	Lys	Ile	Phe	Trp	Gly	Gly	Lys	Ala	Glu	Thr
	145					150				155				160	

Glu Arg Gly Leu Ser Arg Lys His Ile Ile Glu Gly Leu Lys Ala Ser			
165	170	175	
Leu Glu Arg Leu Gln Leu Glu Tyr Val Asp Val Val Phe Ala Asn Arg			
180	185	190	
Pro Asp Pro Asn Thr Pro Met Glu Gly Asp Pro Phe Ser Ser Ser Lys			
195	200	205	
Ser Arg Thr Phe Ile Ile Glu Glu Thr Val Arg Ala Met Thr His Val			
210	215	220	
Ile Asn Gln Gly Met Ala Met Tyr Trp Gly Thr Ser Arg Trp Ser Ser			
225	230	235	240
Met Glu Ile Met Glu Ala Tyr Ser Val Ala Arg Gln Phe Asn Leu Thr			
245	250	255	
Pro Pro Ile Cys Glu Gln Ala Glu Tyr His Met Phe Gln Arg Glu Lys			
260	265	270	
Val Glu Val Gln Leu Pro Glu Leu Phe His Lys Ile Gly Val Gly Ala			
275	280	285	
Met Thr Trp Ser Pro Leu Ala Cys Gly Ile Val Ser Gly Lys Tyr Asp			
290	295	300	
Ser Gly Ile Pro Pro Tyr Ser Arg Ala Ser Leu Lys Gly Tyr Gln Trp			
305	310	315	320
Leu Lys Asp Lys Ile Leu Ser Glu Glu Gly Arg Arg Gln Gln Ala Lys			
325	330	335	
Leu Lys Glu Leu Gln Ala Ile Ala Glu Arg Leu Gly Cys Thr Leu Pro			
340	345	350	
Gln Leu Ala Ile Ala Trp Cys Leu Arg Asn Glu Gly Val Ser Ser Val			
355	360	365	
Leu Leu Gly Ala Ser Asn Ala Asp Gln Leu Met Glu Asn Ile Gly Ala			
370	375	380	
Ile Gln Val Leu Pro Lys Leu Ser Ser Ser Ile Ile His Glu Ile Asp			

出証特 2 0 0 4 - 3 0 5 9 6 6 2

<210> 366

<211> 540

<212> PRT

<213> Homo sapiens

<400> 366

Met Pro Asn Lys Asn Lys Lys Glu Lys Glu Ser Pro Lys Ala Gly Lys

1 5 10 15

Ser Gly Lys Ser Ser Lys Glu Gly Gln Asp Thr Val Glu Ser Glu Gln

20 25 30

Ile Ser Val Arg Lys Asn Ser Leu Val Ala Val Pro Ser Thr Val Ser

35 40 45

Ala Lys Ile Lys Val Pro Val Ser Gln Pro Ile Val Lys Lys Asp Lys

50 55 60

Arg Gln Asn Ser Ser Arg Phe Ser Ala Ser Asn Asn Arg Glu Leu Gln

65 70 75 80

Lys Leu Pro Ser Leu Lys Asp Val Pro Pro Ala Asp Gln Glu Lys Leu

85 90 95

Phe Ile Gln Lys Leu Arg Gln Cys Cys Val Leu Phe Asp Phe Val Ser

100 105 110

Asp Pro Leu Ser Asp Leu Lys Trp Lys Glu Val Lys Arg Ala Ala Leu

115 120 125

Ser Glu Met Val Glu Tyr Ile Thr His Asn Arg Asn Val Ile Thr Glu

130 135 140

Pro Ile Tyr Pro Glu Val Val His Met Phe Ala Val Asn Met Phe Arg

145 150 155 160

Thr Leu Pro Pro Ser Ser Asn Pro Thr Gly Ala Glu Phe Asp Pro Glu

165 170 175

Glu Asp Glu Pro Thr Leu Glu Ala Ala Trp Pro His Leu Gln Leu Val

180	185	190
Tyr Glu Phe Phe Leu Arg Phe Leu Glu Ser Pro Asp Phe Gln Pro Asn		
195	200	205
Ile Ala Lys Lys Tyr Ile Asp Gln Lys Phe Val Leu Gln Leu Leu Glu		
210	215	220
Leu Phe Asp Ser Glu Asp Pro Arg Glu Arg Asp Phe Leu Lys Thr Thr		
225	230	235
Leu His Arg Ile Tyr Gly Lys Phe Leu Gly Leu Arg Ala Tyr Ile Arg		
245	250	255
Lys Gln Ile Asn Asn Ile Phe Tyr Arg Phe Ile Tyr Glu Thr Glu His		
260	265	270
His Asn Gly Ile Ala Glu Leu Leu Glu Ile Leu Gly Ser Ile Ile Asn		
275	280	285
Gly Phe Ala Leu Pro Leu Lys Glu Glu His Lys Ile Phe Leu Leu Lys		
290	295	300
Val Leu Leu Pro Leu His Lys Val Lys Ser Leu Ser Val Tyr His Pro		
305	310	315
Gln Leu Ala Tyr Cys Val Val Gln Phe Leu Glu Lys Asp Ser Thr Leu		
325	330	335
Thr Glu Pro Val Val Met Ala Leu Leu Lys Tyr Trp Pro Lys Thr His		
340	345	350
Ser Pro Lys Glu Val Met Phe Leu Asn Glu Leu Glu Glu Ile Leu Asp		
355	360	365
Val Ile Glu Pro Ser Glu Phe Val Lys Ile Met Glu Pro Leu Phe Arg		
370	375	380
Gln Leu Ala Lys Cys Val Ser Ser Pro His Phe Gln Val Ala Glu Arg		
385	390	395
Ala Leu Tyr Tyr Trp Asn Asn Glu Tyr Ile Met Ser Leu Ile Ser Asp		
405	410	415

Asn Ala Ala Lys Ile Leu Pro Ile Met Phe Pro Ser Leu Tyr Arg Asn

420

425

430

Ser Lys Thr His Trp Asn Lys Thr Ile His Gly Leu Ile Tyr Asn Ala

435

440

445

Leu Lys Leu Phe Met Glu Met Asn Gln Lys Leu Phe Asp Asp Cys Thr

450

455

460

Gln Gln Phe Lys Ala Glu Lys Leu Lys Glu Lys Leu Lys Met Lys Glu

465

470

475

480

Arg Glu Glu Ala Trp Val Lys Ile Glu Asn Leu Ala Lys Ala Asn Pro

485

490

495

Gln Ala Gln Lys Asp Pro Lys Lys Asp Arg Pro Leu Ala Arg Arg Lys

500

505

510

Ser Glu Leu Pro Gln Asp Pro His Thr Lys Lys Ala Leu Glu Ala His

515

520

525

Cys Arg Ala Asp Glu Leu Ala Ser Gln Asp Gly Arg

530

535

540

<210> 367

<211> 361

<212> PRT

<213> Homo sapiens

<400> 367

Met His Cys Ser Cys Leu Ala Glu Gly Ile Pro Ala Asn Pro Gly Asn

1

5

10

15

Trp Ile Ser Gly Leu Ala Phe Pro Asp Trp Ala Tyr Lys Ala Glu Ser

20

25

30

Ser Pro Gly Ser Arg Gln Ile Gln Leu Trp His Phe Ile Leu Glu Leu

35	40	45
Leu Gln Lys Glu Glu Phe Arg His Val Ile Ala Trp Gln Gln Gly Glu		
50	55	60
Tyr Gly Glu Phe Val Ile Lys Asp Pro Asp Glu Val Ala Arg Leu Trp		
65	70	75
Gly Arg Arg Lys Cys Lys Pro Gln Met Asn Tyr Asp Lys Leu Ser Arg		
85	90	95
Ala Leu Arg Tyr Tyr Tyr Asn Lys Arg Ile Leu His Lys Thr Lys Gly		
100	105	110
Lys Arg Phe Thr Tyr Lys Phe Asn Phe Ser Lys Leu Ile Val Val Asn		
115	120	125
Tyr Pro Leu Trp Glu Val Arg Ala Pro Pro Ser Pro His Leu Leu Leu		
130	135	140
Gly Ala Pro Ala Leu Cys Arg Pro Ala Leu Val Pro Val Gly Val Gln		
145	150	155
Ser Glu Leu Leu His Ser Met Leu Phe Ala His Gln Ala Met Val Glu		
165	170	175
Gln Leu Thr Gly Gln Gln Thr Pro Arg Gly Pro Pro Glu Thr Ser Gly		
180	185	190
Asp Lys Lys Gly Ser Ser Ser Ser Val Tyr Arg Leu Gly Ser Ala Pro		
195	200	205
Gly Pro Cys Arg Leu Gly Leu Cys Cys His Leu Gly Ser Val Gln Gly		
210	215	220
Glu Leu Pro Gly Val Ala Ser Phe Thr Pro Pro Leu Pro Pro Pro Leu		
225	230	235
Pro Ser Asn Trp Thr Cys Leu Ser Gly Pro Phe Leu Pro Pro Leu Pro		
245	250	255
Ser Glu Gln Gln Leu Pro Gly Ala Phe Lys Pro Asp Ile Leu Leu Pro		
260	265	270

Gly Pro Arg Ser Leu Pro Gly Ala Trp His Phe Pro Gly Leu Pro Leu

275

280

285

Leu Ala Gly Leu Gly Gln Gly Ala Gly Glu Arg Leu Trp Leu Leu Ser

290

295

300

Leu Arg Pro Glu Gly Leu Glu Val Lys Pro Ala Pro Met Met Glu Ala

305

310

315

320

Lys Gly Gly Leu Asp Pro Arg Glu Val Phe Cys Pro Glu Thr Arg Arg

325

330

335

Leu Lys Thr Gly Glu Glu Ser Leu Thr Ser Pro Asn Leu Glu Asn Leu

340

345

350

Lys Ala Val Trp Pro Leu Asp Pro Pro

355

360

<210> 368

<211> 169

<212> PRT

<213> Homo sapiens

<400> 368

Met Met Lys Thr Leu Asn Ile Leu Asp Met Glu Gly Met Phe Leu Asn

1

5

10

15

Thr Ile Lys Ala Ile Tyr Asp Lys Leu Ile Ala Asn Ile Val Leu Ser

20

25

30

Gly Lys Lys Leu Lys Ala Phe Pro Ile Arg Pro Arg Thr Arg Gln Gly

35

40

45

Cys Pro Leu Leu Pro Leu Leu Phe Asn Ile Val Pro Glu Val Leu Ala

50

55

60

Arg Ala Ile Arg Gln Glu Lys Glu Ile Lys Asp Ile Gln Ile Gly Lys

65 70 75 80
 Ser Glu Met Lys Leu Ser Leu Phe Ala Asp Asn Met Ile Leu His Ile
 85 90 95
 Glu Asn Leu Lys Asp Cys Thr Lys Thr Pro Phe Glu Leu Asp Lys Ser
 100 105 110
 Ser Lys Val Ala Gly Tyr Lys Ile Asn Leu Gln Lys Ser Val His Phe
 115 120 125
 Tyr Thr Leu Thr Val Asn Phe Leu Lys Lys Lys Leu Arg Lys Gln Ser
 130 135 140
 His Leu Gln Tyr His Leu Leu Leu Ser Lys Ile Leu Arg Arg Lys Phe
 145 150 155 160
 Asn Gln Gly Ser Glu Arg Ser Ile His
 165

<210> 369

<211> 182

<212> PRT

<213> Homo sapiens

<400> 369

Met Trp Ile Leu Arg Val Leu Leu Gly Arg His Leu Pro Gln Trp Asn
 1 5 10 15
 Ala Ser Ser Glu Trp Cys Met Ala Gly Pro His Gly Gly Ser Thr Gln
 20 25 30
 Gly Leu Asn Thr Gly Lys Glu Leu Ala Arg Gly Val Arg Thr Ser Gly
 35 40 45
 Ile Trp Glu Ser Ala Ala Trp Asp His Lys Glu Ser Lys Ser Ser Ala
 50 55 60

Thr Cys Trp Ser Leu Arg Pro Glu Gly Arg Pro Asp Phe Arg Asp His
 65 70 75 80
 Pro Trp Met Ser Leu Asp Trp Glu Leu Tyr Val Asp Gly Ser Asn Phe
 85 90 95
 Val Asn Ser Gln Gly Glu Arg Cys Val Gly Tyr Ala Val Val Thr Leu
 100 105 110
 Asp Ala Val Ile Glu Ala Lys Ser Leu Pro Gln Gly Thr Ser Ala Gln
 115 120 125
 Lys Ala Glu Leu Ile Ala Leu Ile Arg Ala Ser Glu Leu Ser Glu Gly
 130 135 140
 Lys Thr Val Asn Ile Tyr Thr Asp Ser Gln Tyr Ala Phe Leu Thr Leu
 145 150 155 160
 Gln Val His Gly Ala Leu Tyr Lys Glu Lys Gly Leu Leu Asn Ser Gly
 165 170 175
 Gly Lys Asp Val Lys Tyr
 180

<210> 370

<211> 957

<212> PRT

<213> Homo sapiens

<400> 370

Met Thr Ser Phe Leu Lys Pro Glu Asn Ala Leu Lys Arg Ala Glu Glu
 1 5 10 15
 Leu Ile Asn Val Gly Gln Lys Gln Asp Ala Leu Gln Thr Leu His Asp
 20 25 30
 Leu Ile Thr Ser Lys Arg Tyr Arg Ala Trp Gln Lys Thr Leu Glu Arg

35	40	45
Ile Met Phe Lys Tyr Val Glu Leu Cys Val Asp Met Arg Lys Gly Arg		
50	55	60
Phe Ala Lys Asp Gly Leu Ile Gln Tyr Arg Ile Ile Cys Gln Gln Val		
65	70	75
Asn Val Ser Ser Leu Glu Glu Val Ile Lys His Phe Met Gln Leu Ser		
85	90	95
Thr Glu Lys Ala Glu Gln Ala Arg Ser Gln Ala Gln Ala Leu Glu Glu		
100	105	110
Ala Leu Asp Val Asp Asp Leu Glu Ala Asp Lys Arg Pro Glu Asp Leu		
115	120	125
Met Leu Ser Tyr Val Ser Gly Glu Lys Gly Lys Asp Arg Ser Asp Arg		
130	135	140
Glu Thr Val Thr Pro Trp Phe Lys Phe Leu Trp Glu Thr Tyr Arg Thr		
145	150	155
Val Leu Glu Ile Leu Arg Asn Asn Ser Lys Leu Glu Ala Leu Tyr Ala		
165	170	175
Met Thr Ala His Arg Ala Phe Gln Phe Cys Lys Gln Tyr Lys Arg Thr		
180	185	190
Thr Glu Leu Arg Arg Leu Cys Glu Ile Ile Arg Asn His Leu Ala Asn		
195	200	205
Leu Asn Lys Tyr Arg Asp Gln Arg Asp Arg Pro Asp Leu Ser Ala Pro		
210	215	220
Glu Ser Leu Gln Leu Tyr Leu Asp Thr Arg Phe Glu Gln Leu Lys Ile		
225	230	235
Ala Thr Glu Leu Gly Leu Trp Gln Glu Ala Phe Arg Ser Val Glu Asp		
245	250	255
Ile His Gly Leu Met Cys Leu Val Lys Lys Thr Pro Lys Pro Ser Leu		
260	265	270

Met Val Val Tyr Tyr Val Lys Leu Thr Glu Ile Phe Trp Ile Ser Ser
275 280 285

Ser His Leu Tyr His Ala Tyr Ala Trp Phe Lys Leu Phe Leu Leu Gln
290 295 300

Lys Ser Phe Asn Lys Asn Leu Ser Gln Lys Asp Leu Gln Leu Ile Ala
305 310 315 320

Ser Ser Val Val Leu Ala Ala Leu Ser Val Pro Pro His Asp Arg Thr
325 330 335

His Gly Ala Ser His Leu Glu Leu Glu His Glu Lys Glu Arg Asn Leu
340 345 350

Arg Met Ala Asn Leu Ile Gly Phe Asn Leu Glu Thr Lys Pro Glu Ser
355 360 365

Arg Glu Met Leu Ser Arg Ala Ser Leu Leu Ala Glu Leu Ala Ser Lys
370 375 380

Gly Val Met Ser Cys Val Thr Gln Glu Val Lys Asp Ile Tyr His Leu
385 390 395 400

Leu Glu His Glu Phe Tyr Pro Ser Asp Leu Ala Leu Lys Ala Leu Pro
405 410 415

Leu Ile Thr Lys Ile Ser Lys Leu Gly Gly Lys Leu Ser Thr Ala Ser
420 425 430

Ser Val Pro Glu Val Gln Leu Ala Gln Tyr Val Pro Ala Leu Glu Arg
435 440 445

Leu Ala Thr Met Arg Leu Leu Gln Gln Val Ser Asn Val Tyr Gln Ser
450 455 460

Met Lys Ile Glu Thr Leu Ser Gly Met Ile Pro Phe Phe Asp Phe Ala
465 470 475 480

Gln Val Glu Lys Ile Ser Val Asp Ala Val Lys Gln Lys Phe Val Ser
485 490 495

Met Lys Val Asp His Met Lys Asn Ala Val Ile Phe Ser Lys Lys Ser

500 505 510
Leu Glu Ser Asp Gly Leu Arg Asp His Leu Gly Asn Phe Ala Glu Gln
515 520 525
Leu Asn Lys Ala Arg Gln Met Ile Tyr Pro Pro Asp Gly Arg Pro Ser
530 535 540
Lys Leu Gly Ala Leu Leu Pro Thr Leu Thr Glu Val Val Ala Lys Glu
545 550 555 560
His Lys Arg Leu Leu Ala Arg Lys Ser Ile Ile Glu Lys Arg Lys Glu
565 570 575
Glu Gln Glu Arg Gln Leu Leu Glu Met Glu Arg Glu Glu Glu Ser Lys
580 585 590
Arg Leu Arg Leu Gln Lys Ile Thr Glu Glu Ala Glu Gln Arg Arg Leu
595 600 605
Ala Thr Glu Tyr Glu Gln Arg Lys Asn Gln Arg Ile Leu Arg Glu Ile
610 615 620
Glu Glu Arg Glu Asn Glu Glu Ala Gln Ala Leu Leu Gln Glu Ala Glu
625 630 635 640
Lys Arg Ile Lys Lys Lys Gly Lys Lys Pro Ile Ile Glu Gly Asp Lys
645 650 655
Ile Thr Lys Gln Thr Leu Met Glu Leu Thr Leu Thr Glu Gln Leu Arg
660 665 670
Glu Arg Gln Glu Met Glu Lys Lys Leu Gln Lys Leu Ala Lys Thr Met
675 680 685
Asp Tyr Leu Glu Arg Ala Lys Arg Glu Glu Ala Ala Pro Leu Ile Glu
690 695 700
Ala Ala Tyr Gln Gln Arg Leu Val Glu Glu Arg Leu Leu His Glu Arg
705 710 715 720
Glu Gln Gln Gln Glu Val Glu Leu Ser Lys Gln Arg His Glu Gly Asp
725 730 735

Leu Lys Glu Lys Glu Arg Leu Val Arg Met Met Gly Asn Lys Glu Val
740 745 750

Tyr Gln Ala Arg Val Val Ser His Arg Gln Ala Glu Phe Asn Arg Leu
755 760 765

Arg Arg Glu Arg Glu Glu Arg Ile Ser Arg Ile Leu Gln Ser Arg Arg
770 775 780

Gln Glu Arg Glu Lys Met Arg Lys Leu Lys Tyr Tyr Leu Lys Leu Glu
785 790 795 800

Glu Glu Arg Gln Gln Lys Leu Arg Glu Ala Glu Glu Ala Arg Lys Arg
805 810 815

Glu Asp Ala Glu Arg Lys Lys Lys Glu Glu Glu Glu Arg Leu Arg Lys
820 825 830

Leu Glu Glu Ile Ala Glu Lys Gln Arg Gln Arg Glu Arg Glu Leu Glu
835 840 845

Glu Lys Glu Lys Gln Arg Arg Glu Ala Leu Leu Gly Arg Ala Ala Ala
850 855 860

Glu Pro Ala Pro Pro Ala Arg Pro Leu Glu Ser Gly Ser Ala Ala Pro
865 870 875 880

Ala Ala Ala Ala Ala Ala Ala Ala Ala Pro Thr Pro Gly Lys Tyr Val
885 890 895

Pro Lys Phe Arg Arg Glu Arg Thr Glu Ser Ala Gly Ala Ala Pro Pro
900 905 910

Pro Glu Thr Asp Arg Trp Asn Ser Ser Ser Arg Pro Asp Gly Asp Arg
915 920 925

Trp Arg Ser Asp Asp Arg Arg Thr Ala Phe Gly Ser Gly Gly Gly Ser
930 935 940

Arg Ser Ser Ser Thr Trp Ser Ser Ser Arg Asn Ala Arg
945 950 955

<210> 371

<211> 177

<212> PRT

<213> Homo sapiens

<400> 371

Met Glu Glu Asp Leu Pro Ser Lys Trp Lys Ala Lys Lys Lys Ala Gly

1 5 10 15

Leu Ala Ile Leu Val Ser Asp Lys Pro Asp Phe Lys Pro Thr Lys Ile

20 25 30

Lys Arg Asp Lys Glu Gly His Tyr Ile Val Val Lys Gly Ser Ile His

35 40 45

Gln Glu Asp Leu Thr Ile Leu Asn Ile Tyr Ala Pro Asn Thr Gly Ala

50 55 60

Pro Arg Ser Ile Lys Gln Val Leu Arg Asp Leu Arg Arg Asp Leu Asp

65 70 75 80

Ser His Thr Ile Ile Met Gly Asp Phe Asn Thr Pro Leu Ser Ile Leu

85 90 95

Asp Arg Ser Thr Arg Gln Lys Val Ile Lys Asp Ile Gln Asp Leu Asn

100 105 110

Ser Ala Leu His Gln Ala Asp Leu Ile Asp Ile Tyr Arg Thr Leu His

115 120 125

His Lys Ser Arg Gln Tyr Ala Phe Phe Ser Ala Pro His Cys Thr Tyr

130 135 140

Ser Lys Ile Gly His Ile Ile Gly Ser Lys Thr Leu Leu Arg Lys Cys

145 150 155 160

Lys Arg Thr Glu Ile Thr Ala Asn Cys Leu Leu Asp Thr Val Gln Ser

165 170 175

Asn

<210> 372

<211> 113

<212> PRT

<213> Homo sapiens

<400> 372

Met	Tyr	Cys	Leu	Lys	Gln	Phe	Leu	Pro	Leu	Cys	Val	Thr	Cys	Gly	Leu
1				5					10					15	
Ser	Ile	Val	Pro	Val	Val	Ile	Ala	Leu	Ile	Tyr	Lys	Cys	Pro	Leu	Phe
			20					25					30		
Leu	Ser	Cys	Asn	Ile	Phe	Leu	Val	Thr	Cys	Val	Thr	Pro	Ser	Val	Thr
		35				40					45				
Val	His	Leu	Cys	Ser	Leu	Tyr	Lys	His	Asn	Ser	Ser	Ser	Ser	Leu	Cys
	50					55					60				
Pro	Thr	Pro	Ser	Leu	Pro	Phe	Gly	Phe	Ala	Cys	Asn	Val	Phe	Ile	Cys
65				70						75				80	
Val	Arg	Gln	Ser	Pro	Thr	Val	Phe	Leu	Pro	Cys	Gly	Ser	Cys	Phe	Gly
				85						90				95	
Ser	Leu	Gln	Met	Ser	Leu	Pro	Thr	Ile	Phe	Leu	Ala	Ser	Ser	Arg	Asp
			100					105						110	
His															

<210> 373

<211> 202

<212> PRT

<213> Homo sapiens

<400> 373

Met Thr Gly Ser Asn Ser His Ile Thr Ile Leu Ile Leu Asn Ala Asn

1 5 10 15

Gly Leu Asn Ala Pro Ile Lys Arg His Arg Leu Thr Asn Trp Ile Lys

20 25 30

Ser Gln Asp Pro Ser Val Cys Cys Ile Glu Glu Thr His Leu Met Cys

35 40 45

Arg Asp Thr His Gly Leu Lys Ile Lys Gly Trp Arg Lys Ile Cys Gln

50 55 60

Ala Asn Gly Lys Gln Lys Lys Glu Gly Val Ala Ile Leu Val Ser Asp

65 70 75 80

Lys Thr Gly Phe Lys Pro Thr Lys Ile Lys Arg Asp Lys Glu Gly His

85 90 95

Tyr Ile Met Val Lys Gly Ser Ile Gln Gln Glu Glu Leu Thr Val Leu

100 105 110

Asn Ile Cys Ala Pro Asn Ile Gly Ala Pro Arg Phe Ile Lys Gln Val

115 120 125

Leu Ser Asp Leu Gln Ser Asp Leu Asp Ser His Thr Ile Ile Met Gly

130 135 140

Asp Phe Asn Thr Pro Leu Ser Thr Leu Asp Arg Ser Thr Arg Gln Lys

145 150 155 160

Val Asn Lys Asp Ile Gln Glu Leu Asn Thr Ala Leu His Gln Ala Asp

165 170 175

Leu Ile Asp Ile Tyr Arg Thr Leu His Pro Thr Ser Thr Glu Tyr Thr

180 185 190

Phe Phe Ser Ala Pro His Leu Phe Gln Asn

195

200

<210> 374

<211> 512

<212> PRT

<213> Homo sapiens

<400> 374

Met Gln Lys Leu Leu Arg Pro Ser Ser Val Pro Phe Leu Ser Ile Ser

1

5

10

15

Val Thr Val Ala Thr Pro Phe Leu Ser Leu Pro Pro Lys Val Ala Asn

20

25

30

Gln Pro Met Ser Ala Ala Ala Ala Gly Ser Ser Leu Lys Arg Gln Leu

35

40

45

Ser Tyr Ser Arg Tyr Leu Ala Leu Ser Ser Thr Asn Thr Cys Ser Val

50

55

60

Cys Arg Cys Leu Ser Leu Thr His Thr His Ser His Pro Lys Asn Asn

65

70

75

80

Lys Thr Leu Leu Leu Leu Asn His Ser Arg Asn Arg Ser Leu His Ser

85

90

95

Ala Ser Glu Gly Ser Phe Ile Thr Gln Pro Asp Pro Val Glu Tyr Gly

100

105

110

Ser Leu Val Asp Ser Lys Glu Lys Pro Phe Asn Ser Arg Leu Asn Arg

115

120

125

Arg Gln Lys Gly Ser Thr Ser Ser Ser Pro Ala Pro Ser Asn Pro Asp

130

135

140

Leu Leu Ala Ile Pro Gly Val Gly Pro Arg Asn Phe Arg Lys Leu Val

145 150 155 160
Gln Lys Gly Ile Ala Gly Val Ala Gln Leu Lys Gln Leu Tyr Lys Asp
 165 170 175
Lys Ser Val Asp Glu Glu Glu Leu Glu Asp Asn Ser Ser Ser Ser Val
 180 185 190
Gln Lys Lys Arg Leu Thr Phe Cys Val Glu Gly Asn Ile Ser Val Gly
 195 200 205
Lys Thr Thr Phe Leu Gln Arg Ile Ala Asn Glu Thr Ile Glu Leu Arg
 210 215 220
Asp Leu Val Glu Val Val Pro Glu Pro Ile Ser Lys Trp Gln Asp Val
225 230 235 240
Gly Pro Asp His Phe Asn Ile Leu Asp Ala Phe Tyr Ala Glu Pro Gln
 245 250 255
Arg Tyr Ala Tyr Thr Phe Gln Asn Tyr Val Phe Val Thr Arg Val Met
 260 265 270
Gln Glu Arg Glu Ser Ser Ala Gly Ile Lys Pro Leu Arg Leu Met Glu
 275 280 285
Arg Ser Val Phe Ser Asp Arg Met Val Phe Val Arg Ala Val His Glu
 290 295 300
Ala Asn Trp Met Asn Gly Met Glu Ile Ser Ile Tyr Asp Ser Trp Phe
305 310 315 320
Asp Pro Val Val Ser Ser Leu Pro Gly Leu Ile Pro Asp Gly Phe Ile
 325 330 335
Tyr Leu Arg Ala Ser Pro Asp Thr Cys His Lys Arg Met Met Leu Arg
 340 345 350
Lys Arg Thr Glu Glu Gly Gly Val Ser Leu Asp Tyr Leu Cys Asp Leu
 355 360 365
His Glu Lys His Glu Ser Trp Leu Phe Pro Ser Gln Ser Gly Asn His
 370 375 380

Gly Val Leu Ser Val Asn Gln Leu Pro His His Ile Asp Asn Ser Leu
 385 390 395 400
 His Pro Asp Ile Arg Asp Arg Val Phe Tyr Leu Glu Gly Gly His Met
 405 410 415
 His Ser Ser Ile Gln Lys Val Pro Ala Leu Val Leu Asp Cys Glu Pro
 420 425 430
 Asn Ile Asp Phe Ser Lys Asp Ile Glu Ala Lys Arg Gln Tyr Ala Arg
 435 440 445
 Gln Val Ala Glu Phe Phe Glu Phe Val Lys Lys Arg Asn Glu Val Ser
 450 455 460
 Ser Lys Glu Gly Ser Ser Gln Ala Gln Pro Gln Val Leu Leu Pro His
 465 470 475 480
 Glu Gly Gly Leu Trp Leu Pro Asp Gly Lys Pro Phe Pro Arg Glu Ala
 485 490 495
 Leu Lys Ser Leu Asp Phe Arg Gln Ala Ala Thr Ser Phe Met Ser Gly
 500 505 510

<210> 375

<211> 277

<212> PRT

<213> Homo sapiens

<400> 375

Met Phe Val Cys Val Thr Ser Ile Thr Val Ile Ile Val Ser Lys Asp
 1 5 10 15
 Arg Glu Phe Cys Leu His Phe Val Met Asp Gly Ser Phe Leu Cys Ser
 20 25 30
 Gln Thr Gly Lys Lys Leu Met Ala Lys Cys Arg Met Leu Ile Gln Glu

35 40 45
Asn Gln Glu Leu Gly Arg Gln Leu Ser Gln Gly Arg Ile Ala Gln Leu
50 55 60
Glu Ala Glu Leu Ala Leu Gln Lys Lys Tyr Ser Glu Glu Leu Lys Ser
65 70 75 80
Ser Gln Asp Glu Leu Asn Asp Phe Ile Ile Gln Leu Asp Glu Glu Val
85 90 95
Glu Gly Met Gln Ser Thr Ile Leu Val Leu Gln Gln Gln Leu Lys Glu
100 105 110
Thr Arg Gln Gln Leu Ala Gln Tyr Gln Gln Gln Gln Ser Gln Ala Ser
115 120 125
Ala Pro Ser Thr Ser Arg Thr Thr Ala Ser Glu Pro Val Glu Gln Ser
130 135 140
Glu Ala Thr Ser Lys Asp Cys Ser Arg Leu Thr Asn Gly Pro Ser Asn
145 150 155 160
Gly Ser Ser Ser Arg Gln Arg Thr Ser Gly Ser Gly Phe His Arg Glu
165 170 175
Gly Asn Thr Thr Glu Asp Asp Phe Pro Ser Ser Pro Gly Asn Gly Asn
180 185 190
Lys Ser Ser Asn Ser Ser Glu Glu Arg Thr Gly Arg Gly Gly Ser Gly
195 200 205
Tyr Val Asn Gln Leu Ser Ala Gly Tyr Glu Ser Val Asp Ser Pro Thr
210 215 220
Gly Ser Glu Asn Ser Leu Thr His Gln Ser Asn Asp Thr Asp Ser Ser
225 230 235 240
His Asp Pro Gln Glu Glu Lys Ala Val Ser Gly Lys Gly Asn Arg Thr
245 250 255
Val Gly Ser Arg His Val Gln Asn Gly Leu Asp Ser Ser Val Asn Val
260 265 270

Gln Gly Ser Val Leu

275

<210> 376

<211> 528

<212> PRT

<213> Homo sapiens

<400> 376

Met Ala Val Gly Gln Leu Val Pro Ser Asn Leu Phe Leu Asn His Ser

1

5

10

15

Ala Ala Thr Thr Leu Ile Pro Thr Ser Thr Pro Pro Arg His Arg His

20

25

30

Leu Leu Cys Ile Ser Ser Ala Asn His Thr Thr Ala Thr Asp Asn Asp

35

40

45

Ser Pro Phe Pro Ser Phe Gly Arg Val Lys Thr Leu Leu Val His Arg

50

55

60

Arg Arg Lys Asp Gln Ser His Arg Arg Ala Val Gln Leu Glu Asp Asp

65

70

75

80

Asn Asp Asp Asp Ile Ala Pro Arg Pro Arg Arg Ser Gln Ser Arg Ser

85

90

95

Arg Gly Gly Glu Arg Trp Asp Met Ile Pro Asn Tyr Thr Pro Gln Ser

100

105

110

Lys Ser Ala Thr Asp Thr Lys Phe Phe Ser Leu Lys Ser Phe Lys Glu

115

120

125

Ile Gly Cys Ser Glu Tyr Met Ile Glu Ser Leu Gln Lys Leu Leu Leu

130

135

140

Ser Arg Pro Ser His Val Gln Ala Met Ala Phe Ala Pro Val Ile Ser

145 150 155 160
Gly Lys Thr Cys Val Ile Ala Asp Gln Ser Gly Ser Gly Lys Thr Leu
 165 170 175
Ala Tyr Leu Ala Pro Ile Ile Gln Leu Leu Arg Leu Glu Glu Leu Glu
 180 185 190
Gly Arg Ser Ser Lys Ser Ser Ser Gln Ala Pro Arg Val Leu Val Leu
 195 200 205
Ala Pro Thr Ala Glu Leu Ala Ser Gln Val Leu Asp Asn Cys Arg Ser
 210 215 220
Leu Ser Lys Ser Gly Val Pro Phe Lys Ser Met Val Val Thr Gly Gly
225 230 235 240
Phe Arg Gln Lys Thr Gln Leu Glu Asn Leu Gln Gln Gly Val Asp Val
 245 250 255
Leu Ile Ala Thr Pro Gly Arg Phe Leu Phe Leu Ile His Glu Gly Phe
 260 265 270
Leu Gln Leu Thr Asn Leu Arg Cys Ala Ile Leu Asp Glu Val Asp Ile
 275 280 285
Leu Phe Gly Asp Glu Asp Phe Glu Val Ala Leu Gln Ser Leu Ile Asn
 290 295 300
Ser Ser Pro Val Asp Thr Gln Tyr Leu Phe Val Thr Ala Thr Leu Pro
305 310 315 320
Lys Asn Val Tyr Thr Lys Leu Val Glu Val Phe Pro Asp Cys Glu Met
 325 330 335
Ile Met Gly Pro Gly Met His Arg Ile Ser Ser Arg Leu Gln Glu Ile
 340 345 350
Ile Val Asp Cys Ser Gly Glu Asp Gly Gln Glu Lys Thr Pro Asp Thr
 355 360 365
Ala Phe Leu Asn Lys Lys Thr Ala Leu Leu Gln Leu Val Glu Glu Asn
 370 375 380

Pro Val Pro Arg Thr Ile Val Phe Cys Asn Lys Ile Glu Thr Cys Arg
 385 390 395 400
 Lys Val Glu Asn Leu Leu Lys Arg Phe Asp Arg Lys Gly Asn His Val
 405 410 415
 Gln Val Leu Pro Phe His Ala Ala Met Thr Gln Glu Ser Arg Leu Ala
 420 425 430
 Ser Met Glu Glu Phe Thr Arg Ser Pro Ser Lys Gly Val Ser Gln Phe
 435 440 445
 Met Val Cys Thr Asp Arg Ala Ser Arg Gly Ile Asp Phe Thr Arg Val
 450 455 460
 Asp His Val Ile Leu Phe Asp Phe Pro Arg Asp Pro Ser Glu Tyr Val
 465 470 475 480
 Arg Arg Val Gly Arg Thr Ala Arg Gly Ala Lys Gly Val Gly Lys Ala
 485 490 495
 Phe Ile Phe Val Val Gly Lys Gln Val Ser Leu Ala Arg Lys Ile Met
 500 505 510
 Glu Arg Asn Gln Lys Gly His Pro Leu His Asp Val Pro Ser Ala Tyr
 515 520 525

<210> 377

<211> 238

<212> PRT

<213> Homo sapiens

<400> 377

Met Cys Gly Leu Ser Phe Met Leu Phe Arg Ala Cys Leu Lys Met Asp
 1 5 10 15
 Leu Gly Val Phe Ile Cys Val Phe Ile Ser Phe Ser Pro Leu Phe Lys

20	25	30
Ser Thr Ala Asp Cys Pro Asp Ala Val Pro Ser Ser Ala Glu Thr Gly		
35	40	45
Gly Thr Asn Tyr Leu Ala Pro Gly Gly Leu Ser Asp Ser Gln Leu Leu		
50	55	60
Leu Glu Pro Gly Asp Arg Ser His Trp Cys Val Val Ala Tyr Trp Glu		
65	70	75
Glu Lys Thr Arg Val Gly Arg Leu Tyr Cys Val Gln Glu Pro Ser Leu		
85	90	95
Asp Ile Phe Tyr Asp Leu Pro Gln Gly Asn Gly Phe Cys Leu Gly Gln		
100	105	110
Leu Asn Ser Asp Asn Lys Ser Gln Leu Val Gln Lys Val Arg Ser Lys		
115	120	125
Ile Gly Cys Gly Ile Gln Leu Thr Arg Glu Val Asp Gly Val Trp Val		
130	135	140
Tyr Asn Arg Ser Ser Tyr Pro Ile Phe Ile Lys Ser Ala Thr Leu Asp		
145	150	155
Asn Pro Asp Ser Arg Thr Leu Leu Val His Lys Val Phe Pro Gly Phe		
165	170	175
Ser Ile Lys Ala Phe Asp Tyr Glu Lys Ala Tyr Ser Leu Gln Arg Pro		
180	185	190
Asn Asp His Glu Phe Met Gln Gln Pro Trp Thr Gly Phe Thr Val Gln		
195	200	205
Ile Ser Phe Val Lys Gly Trp Gly Gln Cys Tyr Thr Arg Gln Phe Ile		
210	215	220
Ser Ser Cys Pro Cys Trp Leu Glu Val Ile Phe Asn Ser Arg		
225	230	235

<210> 378

<211> 307

<212> PRT

<213> Homo sapiens

<400> 378

Met Gln Ala Leu Ser Thr Val Pro Leu Asp Trp Val Thr Val Pro Lys

1 5 10 15

Leu Gln Glu Cys Gly Ala Arg Pro Ala Met Glu Lys Pro Thr Arg Val

20 25 30

Val Gly Gly Phe Gly Ala Ala Ser Gly Glu Val Pro Trp Gln Val Ser

35 40 45

Leu Lys Glu Gly Ser Arg His Phe Cys Gly Ala Thr Val Val Gly Asp

50 55 60

Arg Trp Leu Leu Ser Ala Ala His Cys Phe Asn His Thr Lys Val Glu

65 70 75 80

Gln Val Arg Ala His Leu Gly Thr Ala Ser Leu Leu Gly Leu Gly Gly

85 90 95

Ser Pro Val Lys Ile Gly Leu Arg Arg Val Val Leu His Pro Leu Tyr

100 105 110

Asn Pro Gly Ile Leu Asp Phe Asp Leu Ala Val Leu Glu Leu Ala Ser

115 120 125

Pro Leu Ala Phe Asn Lys Tyr Ile Gln Pro Val Cys Leu Pro Leu Ala

130 135 140

Ile Gln Lys Phe Pro Val Gly Arg Lys Cys Met Ile Ser Gly Trp Gly

145 150 155 160

Asn Thr Gln Glu Gly Asn Ala Thr Lys Pro Glu Leu Leu Gln Lys Ala

165 170 175

Ser Val Gly Ile Ile Asp Gln Lys Pro Cys Ser Val Leu Tyr Asn Phe

180 185 190
 Ser Leu Thr Asp Arg Met Ile Cys Ala Gly Phe Leu Glu Gly Lys Val
 195 200 205
 Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Ala Cys Glu Glu Ala
 210 215 220
 Pro Gly Val Phe Tyr Leu Ala Gly Ile Val Ser Trp Gly Ile Gly Cys
 225 230 235 240
 Ala Gln Val Lys Lys Pro Gly Val Tyr Thr Arg Ile Thr Arg Leu Lys
 245 250 255
 Gly Trp Ile Leu Glu Ile Met Ser Ser Gln Pro Leu Pro Met Ser Pro
 260 265 270
 Pro Ser Thr Thr Arg Met Leu Ala Thr Thr Ser Pro Arg Thr Thr Ala
 275 280 285
 Gly Leu Thr Val Pro Gly Ala Thr Pro Ser Arg Pro Thr Pro Gly Leu
 290 295 300
 Pro Ala Gly
 305

<210> 379

<211> 583

<212> PRT

<213> Homo sapiens

<400> 379

Met Ser Val Ile Val Lys Thr Gln Glu Gly Asp Ile Leu Leu Phe Cys
 1 5 10 15
 Lys Gly Ala Asp Ser Ala Val Phe Pro Arg Val Gln Asn His Glu Ile
 20 25 30

Glu Leu Thr Lys Val His Val Glu Arg Asn Ala Met Asp Gly Tyr Arg
 35 40 45
 Thr Leu Cys Val Ala Phe Lys Glu Ile Ala Pro Asp Asp Tyr Glu Arg
 50 55 60
 Ile Asn Arg Gln Leu Ile Glu Ala Lys Met Ala Leu Gln Asp Arg Glu
 65 70 75 80
 Glu Lys Met Glu Lys Val Phe Asp Asp Ile Glu Thr Asn Met Asn Leu
 85 90 95
 Ile Gly Ala Thr Ala Val Glu Asp Lys Leu Gln Asp Gln Ala Ala Glu
 100 105 110
 Thr Ile Glu Ala Leu His Ala Ala Gly Leu Lys Val Trp Val Leu Thr
 115 120 125
 Gly Asp Lys Met Glu Thr Ala Lys Ser Thr Cys Tyr Ala Cys Arg Leu
 130 135 140
 Phe Gln Thr Asn Thr Glu Leu Leu Glu Leu Thr Thr Lys Thr Ile Glu
 145 150 155 160
 Glu Ser Glu Arg Lys Glu Asp Arg Leu His Glu Leu Leu Ile Glu Tyr
 165 170 175
 Arg Lys Lys Leu Leu His Glu Phe Pro Lys Ser Thr Arg Ser Phe Lys
 180 185 190
 Lys Ala Trp Thr Glu His Gln Glu Tyr Gly Leu Ile Ile Asp Gly Ser
 195 200 205
 Thr Leu Ser Leu Ile Leu Asn Ser Ser Gln Asp Ser Ser Ser Asn Asn
 210 215 220
 Tyr Lys Ser Ile Phe Leu Gln Ile Cys Met Lys Cys Thr Ala Val Leu
 225 230 235 240
 Cys Cys Arg Met Ala Pro Leu Gln Lys Ala Gln Ile Val Arg Met Val
 245 250 255
 Lys Asn Leu Lys Gly Ser Pro Ile Thr Leu Ser Ile Gly Asp Gly Ala

260 265 270
Asn Asp Val Ser Met Ile Leu Glu Ser His Val Gly Ile Gly Ile Lys
275 280 285
Gly Lys Glu Gly Arg Gln Ala Ala Arg Asn Ser Asp Tyr Ser Val Pro
290 295 300
Lys Phe Lys His Leu Lys Lys Leu Leu Leu Ala His Gly His Leu Tyr
305 310 315 320
Tyr Val Arg Ile Ala His Leu Val Gln Tyr Phe Phe Tyr Lys Asn Leu
325 330 335
Cys Phe Ile Leu Pro Gln Phe Leu Tyr Gln Phe Phe Cys Gly Phe Ser
340 345 350
Gln Gln Pro Leu Tyr Asp Ala Ala Tyr Leu Thr Met Tyr Asn Ile Cys
355 360 365
Phe Thr Ser Leu Pro Ile Leu Ala Tyr Ser Leu Leu Glu Gln His Ile
370 375 380
Asn Ile Asp Thr Leu Thr Ser Asp Pro Arg Leu Tyr Met Lys Ile Ser
385 390 395 400
Gly Asn Ala Met Leu Gln Leu Gly Pro Phe Leu Tyr Trp Thr Phe Leu
405 410 415
Ala Ala Phe Glu Gly Thr Val Phe Phe Phe Gly Thr Tyr Phe Leu Phe
420 425 430
Gln Thr Ala Ser Leu Glu Glu Asn Gly Lys Val Tyr Gly Asn Trp Thr
435 440 445
Phe Gly Thr Ile Val Phe Thr Val Leu Val Phe Thr Val Thr Leu Lys
450 455 460
Leu Ala Leu Asp Thr Arg Phe Trp Thr Trp Ile Asn His Phe Val Ile
465 470 475 480
Trp Gly Ser Leu Ala Phe Tyr Val Phe Phe Ser Phe Phe Trp Gly Gly
485 490 495

Ile Ile Trp Pro Phe Leu Lys Gln Gln Arg Met Tyr Phe Val Phe Ala
 500 505 510
 Gln Met Leu Ser Ser Val Ser Thr Trp Leu Ala Ile Ile Leu Leu Ile
 515 520 525
 Phe Ile Ser Leu Phe Pro Glu Ile Leu Leu Ile Val Leu Lys Asn Val
 530 535 540
 Arg Arg Arg Ser Ala Arg Arg Asn Leu Ser Cys Arg Arg Ala Ser Asp
 545 550 555 560
 Ser Leu Ser Ala Arg Pro Ser Val Arg Pro Leu Leu Leu Arg Thr Phe
 565 570 575
 Ser Asp Glu Ser Asn Val Leu
 580

<210> 380

<211> 171

<212> PRT

<213> Homo sapiens

<400> 380

Met His Leu Trp Arg Tyr Pro Ser Leu Ser Ile His Gly Ile Glu Gly
 1 5 10 15
 Ala Phe Asp Glu Pro Gly Thr Lys Thr Val Ile Pro Gly Arg Val Ile
 20 25 30
 Gly Lys Phe Ser Ile Arg Leu Val Pro His Met Asn Val Ser Ala Val
 35 40 45
 Glu Lys Gln Val Thr Arg His Leu Glu Asp Val Phe Ser Lys Arg Asn
 50 55 60
 Ser Ser Asn Lys Met Val Val Ser Met Thr Leu Gly Leu His Pro Trp

65 70 75 80
 Ile Ala Asn Ile Asp Asp Thr Gln Tyr Leu Ala Ala Lys Arg Ala Ile
 85 90 95
 Arg Thr Val Phe Gly Thr Glu Pro Asp Met Ile Arg Asp Gly Ser Thr
 100 105 110
 Ile Pro Ile Ala Lys Met Phe Gln Glu Ile Val His Lys Ser Val Val
 115 120 125
 Leu Ile Pro Leu Gly Ala Val Asp Asp Gly Glu His Ser Gln Asn Glu
 130 135 140
 Lys Ile Asn Arg Ser Ala Asp Ala Cys Ala Met Cys Leu Ser Leu Leu
 145 150 155 160
 Pro Leu Leu His Thr Pro Gly Ser Thr Arg Gly
 165 170

<210> 381

<211> 446

<212> PRT

<213> Homo sapiens

<400> 381

Met Leu Gly Gly Val Val Glu Leu Ala Ala Ala Ser Ser Phe Pro Leu
 1 5 10 15
 Leu Glu Gln Phe Ala Gly Asp Gly Phe His Ala Asp Gly Asp Asp Val
 20 25 30
 Leu Thr Glu Leu Cys Ala Pro Asp Gly Ala Pro Pro Gly Val Val Pro
 35 40 45
 Val Leu Ser Ala His Ser Pro Ser Leu Gly Ser Glu Tyr Phe Ile Arg
 50 55 60

Leu Glu Glu Ala Ala Pro Ala Thr Gly His Asp Pro Asp Cys Ala Gly
65 70 75 80
Cys Ala Pro Ser Pro Pro Ala Ile Ala Asp Gln Asp Asp Asp Ser Asp
85 90 95
Gly Ser Thr Ala Ala Ser Leu Ala Met Glu Pro Leu Leu Gly His Gly
100 105 110
Pro Pro Val Asp Val Pro Trp Gly Arg Gly Asp His Tyr Pro Arg Arg
115 120 125
Ser Leu Ala Arg Asp Pro Leu Cys Pro Ser Arg Ser Pro Ser Pro Ser
130 135 140
Ala Gly Pro Leu Ser Leu Ala Glu Gly Gly Ala Glu Asp Ala Asp Trp
145 150 155 160
Gly Val Ala Ala Phe Cys Pro Ala Phe Phe Glu Asp Pro Leu Gly Thr
165 170 175
Ser Pro Leu Gly Ser Ser Gly Ala Pro Pro Leu Pro Leu Thr Gly Glu
180 185 190
Asp Glu Leu Glu Glu Val Gly Ala Arg Arg Ala Ala Gln Arg Gly His
195 200 205
Trp Arg Ser Asn Val Ser Ala Asn Asn Asn Ser Gly Ser Arg Cys Pro
210 215 220
Glu Ser Trp Asp Pro Val Ser Ala Gly Gly His Ala Glu Gly Cys Pro
225 230 235 240
Ser Pro Lys Gln Thr Pro Arg Ala Ser Pro Glu Pro Gly Tyr Pro Gly
245 250 255
Glu Pro Leu Leu Gly Leu Gln Ala Ala Ser Ala Gln Glu Pro Gly Cys
260 265 270
Cys Pro Gly Leu Pro His Leu Cys Ser Ala Gln Gly Leu Ala Pro Ala
275 280 285
Pro Cys Leu Val Thr Pro Ser Trp Thr Glu Thr Ala Ser Ser Gly Gly

290	295	300	
Asp His Pro Gln Ala Glu Pro Lys Leu Ala Thr Glu Ala Glu Gly Thr			
305	310	315	320
Thr Gly Pro Arg Leu Pro Leu Pro Ser Val Pro Ser Pro Ser Gln Glu			
	325	330	335
Gly Ala Pro Leu Pro Ser Glu Glu Ala Ser Ala Pro Asp Ala Pro Asp			
	340	345	350
Ala Leu Pro Asp Ser Pro Thr Pro Ala Thr Gly Gly Glu Val Ser Ala			
	355	360	365
Ile Lys Leu Ala Ser Ala Leu Asn Gly Ser Ser Ser Ser Pro Glu Val			
	370	375	380
Glu Ala Pro Ser Ser Glu Asp Glu Asp Thr Ala Glu Ala Thr Ser Gly			
385	390	395	400
Ile Phe Thr Asp Thr Ser Ser Asp Gly Leu Gln Ala Arg Arg Pro Asp			
	405	410	415
Val Val Pro Ala Phe Arg Ser Leu Gln Lys Gln Trp Pro Gln Arg Glu			
	420	425	430
Glu Ser Leu Pro Arg Leu Cys Leu Leu Leu Arg Pro Arg Gly			
	435	440	445

<210> 382

<211> 106

<212> PRT

<213> Homo sapiens

<400> 382

Met Val Thr Lys Ala Thr Phe His Gln Lys Thr Gln Cys Trp Ala Cys

1

5

10

15

Glu Glu Gly Val Gln Gln Ser Phe His Cys Pro Cys Arg Leu Gln Ala
 20 25 30
 Ala Ala Ser Val Glu Arg Tyr Thr Glu Leu Leu Lys Glu Phe Leu Phe
 35 40 45
 Lys Val Gln Ser Ser Asp Trp Met Pro Cys Trp Ile Pro Leu Leu Pro
 50 55 60
 Gln Ala Leu Ile Thr Leu Ser Ser Cys Ser Leu Gly Lys Cys Thr Phe
 65 70 75 80
 Tyr Thr Asn Val Arg Gln Phe Pro Gln Leu Pro Leu Leu Asp Ile Lys
 85 90 95
 Glu Phe Thr Phe Leu Thr Ile Phe Gln Ser
 100 105

<210> 383

<211> 107

<212> PRT

<213> Homo sapiens

<400> 383

Met Tyr Leu Leu Ile Met Glu Phe Met Ser Phe Pro Ser Phe Ala Trp
 1 5 10 15
 Pro Arg Phe Phe Phe Ser Leu Lys Phe Leu Leu Arg Cys Tyr Leu Gly
 20 25 30
 Cys Leu His Tyr Lys Gln Ala Ala Leu Pro Pro Leu Phe Val Val Thr
 35 40 45
 Gly Glu Lys Pro Tyr Lys Cys Thr Trp Glu Gly Cys Asp Trp Arg Phe
 50 55 60
 Ala Arg Ser Asp Glu Leu Thr Arg His Tyr Arg Lys His Thr Gly Ala

65	70	75	80
Lys Pro Phe Gln Cys Gly Val Cys Asn Arg Ser Phe Ser Arg Ser Asp			
	85	90	95
His Leu Ala Leu His Met Lys Arg His Gln Asn			
100	105		

<210> 384

<211> 667

<212> PRT

<213> Homo sapiens

<400> 384

Met Glu Asp Leu Ser Ser Pro Asp Ser Thr Leu Leu Gln Gly Gly His			
1	5	10	15
Asn Leu Leu Ser Ser Ala Ser Phe Gln Glu Ala Val Thr Phe Lys Asp			
	20	25	30
Val Ile Val Asp Phe Thr Gln Glu Glu Trp Lys Gln Leu Asp Pro Gly			
	35	40	45
Gln Arg Asp Leu Phe Arg Asp Val Thr Leu Glu Asn Tyr Thr His Leu			
50	55	60	
Val Ser Ile Gly Leu Gln Val Ser Lys Pro Asp Val Ile Ser Gln Leu			
65	70	75	80
Glu Gln Gly Thr Glu Pro Trp Ile Met Glu Pro Ser Ile Pro Val Gly			
	85	90	95
Thr Cys Ala Asp Trp Glu Thr Arg Leu Glu Asn Ser Val Ser Ala Pro			
	100	105	110
Glu Pro Asp Ile Ser Glu Glu Glu Leu Ser Pro Glu Val Ile Val Glu			
115	120	125	

Lys His Lys Arg Asp Asp Ser Trp Ser Ser Asn Leu Leu Glu Ser Trp
 130 135 140
 Glu Tyr Glu Gly Ser Leu Glu Arg Gln Gln Ala Asn Gln Gln Thr Leu
 145 150 155 160
 Pro Lys Glu Ile Lys Val Thr Glu Lys Thr Ile Pro Ser Trp Glu Lys
 165 170 175
 Gly Pro Val Asn Asn Glu Phe Gly Lys Ser Val Asn Val Ser Ser Asn
 180 185 190
 Leu Val Thr Gln Glu Pro Ser Pro Glu Glu Thr Ser Thr Lys Arg Ser
 195 200 205
 Ile Lys Gln Asn Ser Asn Pro Val Lys Lys Glu Lys Ser Cys Lys Cys
 210 215 220
 Asn Glu Cys Gly Lys Ala Phe Ser Tyr Cys Ser Ala Leu Ile Arg His
 225 230 235 240
 Gln Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Glu
 245 250 255
 Lys Ala Phe Ser Arg Ser Glu Asn Leu Ile Asn His Gln Arg Ile His
 260 265 270
 Thr Gly Asp Lys Pro Tyr Lys Cys Asp Gln Cys Gly Lys Gly Phe Ile
 275 280 285
 Glu Gly Pro Ser Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys
 290 295 300
 Pro Tyr Lys Cys Asp Glu Cys Gly Lys Ala Phe Ser Gln Arg Thr His
 305 310 315 320
 Leu Val Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Thr Cys
 325 330 335
 Asn Glu Cys Gly Lys Ala Phe Ser Gln Arg Gly His Phe Met Glu His
 340 345 350
 Gln Lys Ile His Thr Gly Glu Lys Pro Phe Lys Cys Asp Glu Cys Asp

355	360	365
Lys Thr Phe Thr Arg Ser Thr His Leu Thr Gln His Gln Lys Ile His		
370	375	380
Thr Gly Glu Lys Thr Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Asn		
385	390	395
Gly Pro Ser Thr Phe Ile Arg His His Met Ile His Thr Gly Glu Lys		
405	410	415
Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln His Ser Asn		
420	425	430
Leu Thr Gln His Gln Lys Thr His Thr Gln Glu Lys Ala Tyr Glu Cys		
435	440	445
Lys Glu Cys Gly Lys Ala Phe Ile Arg Ser Ser Ser Leu Ala Lys His		
450	455	460
Glu Arg Ile His Thr Gly Glu Lys Pro Tyr Gln Cys His Glu Cys Gly		
465	470	475
Lys Thr Phe Ser Tyr Gly Ser Ser Leu Ile Gln His Arg Lys Ile His		
485	490	495
Thr Gly Glu Arg Pro Tyr Lys Cys Asn Glu Cys Gly Arg Ala Phe Asn		
500	505	510
Gln Asn Ile His Leu Thr Gln His Lys Arg Ile His Thr Gly Ala Lys		
515	520	525
Pro Tyr Glu Cys Ala Glu Cys Gly Lys Ala Phe Arg His Cys Ser Ser		
530	535	540
Leu Ala Gln His Gln Lys Thr His Thr Glu Glu Lys Pro Tyr Gln Cys		
545	550	555
Asn Lys Cys Glu Lys Thr Phe Ser Gln Ser Ser His Leu Thr Gln His		
565	570	575
Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Asp		
580	585	590

Lys Ala Phe Ser Arg Ser Thr His Leu Thr Glu His Gln Asn Thr His
 595 600 605
 Thr Gly Glu Lys Pro Tyr Asn Cys Asn Glu Cys Arg Lys Thr Phe Ser
 610 615 620
 Gln Ser Thr Tyr Leu Ile Gln His Gln Arg Ile His Ser Gly Glu Lys
 625 630 635 640
 Pro Phe Gly Cys Asn Asp Cys Gly Lys Ser Phe Arg Tyr Arg Ser Ala
 645 650 655
 Leu Asn Lys His Gln Arg Leu His Pro Gly Ile
 660 665

<210> 385

<211> 460

<212> PRT

<213> Homo sapiens

<400> 385

Met Glu Val Leu Glu Ser Gly Glu Gln Gly Val Leu Gln Trp Asp Arg
 1 5 10 15
 Lys Leu Ser Glu Leu Ser Glu Pro Gly Asp Gly Glu Ala Leu Met Tyr
 20 25 30
 His Thr His Phe Ser Glu Leu Leu Asp Glu Phe Ser Gln Asn Val Leu
 35 40 45
 Gly Gln Leu Leu Asn Asp Pro Phe Leu Ser Glu Lys Ser Val Ser Met
 50 55 60
 Glu Val Glu Pro Ser Pro Thr Ser Pro Ala Pro Leu Ile Gln Ala Glu
 65 70 75 80
 His Ser Tyr Ser Leu Cys Glu Glu Pro Arg Ala Gln Ser Pro Phe Thr

	85	90	95
His Ile Thr Thr Ser Asp Ser Phe Asn Asp Asp Glu Val Glu Ser Glu			
100	105	110	
Lys Trp Tyr Leu Ser Thr Asp Phe Pro Ser Thr Ser Ile Lys Thr Glu			
115	120	125	
Pro Val Thr Asp Glu Pro Pro Pro Gly Leu Val Pro Ser Val Thr Leu			
130	135	140	
Thr Ile Thr Ala Ile Ser Thr Pro Leu Glu Lys Glu Glu Pro Pro Leu			
145	150	155	160
Glu Met Asn Thr Gly Val Asp Ser Ser Cys Gln Thr Ile Ile Pro Lys			
165	170	175	
Ile Lys Leu Glu Pro His Glu Val Asp Gln Phe Leu Asn Phe Ser Pro			
180	185	190	
Lys Glu Ala Pro Val Asp His Leu His Leu Pro Pro Thr Pro Pro Ser			
195	200	205	
Ser His Gly Ser Asp Ser Glu Gly Ser Leu Ser Pro Asn Pro Arg Leu			
210	215	220	
His Pro Phe Ser Leu Pro Gln Thr His Ser Pro Ser Arg Ala Ala Pro			
225	230	235	240
Arg Ala Pro Ser Ala Leu Ser Ser Ser Pro Leu Leu Thr Ala Pro His			
245	250	255	
Lys Leu Gln Gly Ser Gly Pro Leu Val Leu Thr Glu Glu Glu Lys Arg			
260	265	270	
Thr Leu Ile Ala Glu Gly Tyr Pro Ile Pro Thr Lys Leu Pro Leu Ser			
275	280	285	
Lys Ser Glu Glu Lys Ala Leu Lys Lys Ile Arg Arg Lys Ile Lys Asn			
290	295	300	
Lys Ile Ser Ala Gln Glu Ser Arg Arg Lys Lys Lys Glu Tyr Met Asp			
305	310	315	320

出証特 2 0 0 4 - 3 0 5 9 6 6 2

20	25	30
Leu Ala Gln Leu His Ser Leu Asn Ile Gln Ser Leu Gln Leu Glu Gly		
35	40	45
Tyr Gly Ile Gly Ala Gly Tyr Cys Lys Arg Gln Val Ser Thr Trp Thr		
50	55	60
Lys Gln Tyr Gln Ala Ala Ala His Gln Asp Ile Pro Ala Met Gln Gln		
65	70	75
80		
Leu Ser Glu Trp Leu Met Lys Asn Leu Pro Asp Asn Asp Asn Glu Glu		
85	90	95
Asn Leu Ile His Gly Asp Phe Arg Leu Asp Asn Ile Val Phe His Pro		
100	105	110
Lys Glu Cys Arg Val Ile Ala Val Leu Asp Trp Glu Leu Ser Thr Ile		
115	120	125
Gly His Pro Leu Ser Asp Leu Ala His Phe Ser Leu Phe Tyr Phe Trp		
130	135	140
Pro Arg Thr Val Pro Met Ile Asn Gln Gly Ser Tyr Ser Glu Asn Ser		
145	150	155
160		
Gly Ile Pro Ser Met Glu Glu Leu Ile Ser Ile Tyr Cys Arg Cys Arg		
165	170	175
Gly Ile Asn Ser Ile Leu Pro Asn Trp Asn Phe Phe Leu Ala Leu Ser		
180	185	190
Tyr Phe Lys Met Ala Gly Ile Ala Gln Gly Val Tyr Ser Arg Tyr Leu		
195	200	205
Leu Gly Asn Asn Ser Ser Glu Asp Ser Phe Leu Phe Ala Asn Ile Val		
210	215	220
Gln Pro Leu Ala Glu Thr Gly Leu Gln Leu Ser Lys Arg Thr Phe Ser		
225	230	235
240		
Thr Val Leu Pro Gln Ile Asp Thr Thr Gly Gln Leu Phe Val Gln Thr		
245	250	255

Arg Lys Gly Gln Glu Val Leu Ile Lys Val Lys His Phe Met Lys Gln
260 265 270
His Ile Leu Pro Ala Glu Lys Glu Val Thr Glu Phe Tyr Val Gln Asn
275 280 285
Glu Asn Ser Val Asp Lys Trp Gly Lys Pro Leu Val Ile Asp Lys Leu
290 295 300
Lys Glu Met Ala Lys Val Glu Gly Leu Trp Asn Leu Phe Leu Pro Ala
305 310 315 320
Val Ser Gly Leu Ser His Val Asp Tyr Ala Leu Ile Ala Glu Glu Thr
325 330 335
Gly Lys Cys Phe Phe Ala Pro Asp Val Phe Asn Cys Gln Ala Pro Asp
340 345 350
Thr Gly Asn Met Glu Val Leu His Leu Tyr Gly Ser Glu Glu Gln Lys
355 360 365
Lys Gln Trp Leu Glu Pro Leu Leu Gln Gly Asn Ile Thr Ser Cys Phe
370 375 380
Cys Met Thr Glu Pro Asp Val Ala Ser Ser Asp Ala Thr Asn Ile Glu
385 390 395 400
Cys Ser Ile Gln Arg Asp Glu Asp Ser Tyr Val Ile Asn Gly Lys Lys
405 410 415
Trp Trp Ser Ser Gly Ala Gly Asn Pro Lys Cys Lys Ile Ala Ile Val
420 425 430
Leu Gly Arg Thr Gln Asn Thr Ser Leu Ser Arg
435 440

<210> 387

<211> 370

<212> PRT

<213> Homo sapiens

<400> 387

Met	Met	Thr	Pro	Gln	Val	Ile	Thr	Pro	Gln	Gln	Met	Gln	Gln	Ile	Leu
1				5					10					15	
Gln	Gln	Gln	Val	Leu	Ser	Pro	Gln	Gln	Leu	Gln	Ala	Leu	Leu	Gln	Gln
			20						25					30	
Gln	Gln	Ala	Val	Met	Leu	Gln	Gln	Asp	Phe	Leu	Asp	Ser	Gly	Leu	Glu
		35						40						45	
Asn	Phe	Arg	Ala	Ala	Leu	Glu	Lys	Asn	Gln	Gln	Leu	Gln	Glu	Phe	Tyr
	50							55						60	
Lys	Lys	Gln	Gln	Glu	Gln	Leu	His	Leu	Gln	Leu	Leu	Gln	Gln	Gln	Gln
65					70					75					80
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln
					85					90					95
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln
					100					105					110
Gln	Gln	Gln	Gln	His	Pro	Gly	Lys	Gln	Ala	Lys	Glu	Gln	Gln	Gln	Gln
				115						120					125
Gln	Gln	Gln	Gln	Gln	Gln	Leu	Ala	Ala	Gln	Gln	Leu	Val	Phe	Gln	Gln
						130									140
Gln	Leu	Leu	Gln	Met	Gln	Gln	Leu	Gln	Gln	Gln	Gln	His	Leu	Leu	Ser
145						150									160
Leu	Gln	Arg	Gln	Gly	Leu	Ile	Ser	Ile	Pro	Pro	Gly	Gln	Ala	Ala	Leu
						165									175
Pro	Val	Gln	Ser	Leu	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ala	Glu	Ile	Gln
						180									190
Gln	Leu	Trp	Lys	Glu	Val	Thr	Gly	Val	His	Ser	Met	Glu	Asp	Asn	Gly
															205
						195									200

Ile Lys His Gly Gly Leu Asp Leu Thr Thr Asn Asn Ser Ser Ser Thr
210 215 220
Thr Ser Ser Asn Thr Ser Lys Ala Ser Pro Pro Ile Thr His His Ser
225 230 235 240
Ile Val Asn Gly Gln Ser Ser Val Leu Ser Ala Arg Arg Asp Ser Ser
245 250 255
Ser His Glu Glu Thr Gly Ala Ser His Thr Leu Tyr Gly His Gly Val
260 265 270
Cys Lys Trp Pro Gly Cys Glu Ser Ile Cys Glu Asp Phe Gly Gln Phe
275 280 285
Leu Lys His Leu Asn Asn Glu His Ala Leu Asp Asp Arg Ser Thr Ala
290 295 300
Gln Cys Arg Val Gln Met Gln Val Val Gln Gln Leu Glu Ile Gln Leu
305 310 315 320
Ser Lys Glu Arg Glu Arg Leu Gln Ala Met Met Thr His Leu His Met
325 330 335
Arg Pro Ser Glu Pro Lys Pro Ser Pro Lys Pro Lys Leu Pro Gln Thr
340 345 350
Met Asn Phe Ile Lys Met Gln Met Ser Asp Leu His Leu Leu Met Gln
355 360 365
Leu Ser
370

<210> 388

<211> 379

<212> PRT

<213> Homo sapiens

<400> 388

Met	Ser	Arg	Gly	Tyr	Ser	Glu	Asn	Asn	Asn	Phe	Leu	Asn	Asn	Asn	Asn
1				5					10					15	
Gln	Met	Val	Leu	Asp	Met	Ile	Leu	Tyr	Pro	Leu	Ile	Gly	Ile	Pro	Gln
			20					25					30		
Thr	Ile	Asn	Trp	Glu	Thr	Ile	Ala	Arg	Leu	Val	Pro	Gly	Leu	Thr	Pro
		35					40					45			
Lys	Glu	Cys	Ala	Lys	Arg	Phe	Asp	Glu	Leu	Lys	Ser	Ser	Gly	Ser	Ser
	50					55					60				
Pro	Val	Asp	Asn	Gln	Tyr	Asn	Ser	Leu	Met	Ala	Ala	Gly	Glu	Ser	Pro
65				70					75					80	
Val	Glu	Thr	Leu	Ala	Thr	Tyr	Ile	Lys	Ser	Ser	Leu	Leu	Asp	Ile	His
			85					90					95		
Gly	Glu	Phe	Gln	Glu	Thr	Pro	Val	Gly	His	Asp	Ala	Val	Ser	Lys	Thr
		100						105					110		
Gly	Arg	His	Ser	Ile	Ala	Ser	Thr	Arg	Asn	Cys	Ser	Ser	Glu	Ser	Glu
	115					120					125				
Asn	Cys	Thr	Thr	His	Asn	Gly	Gly	Glu	Met	Thr	Glu	Glu	Ser	Glu	Gly
	130					135					140				
Pro	Asn	Met	Val	Ile	His	Val	Cys	Asp	Glu	Ala	Lys	Asn	Leu	Lys	Glu
145				150					155					160	
Asp	Phe	Thr	Cys	Pro	Arg	Asp	Leu	Leu	Ile	Ser	Glu	Met	Lys	Tyr	Phe
			165						170				175		
Ala	Glu	Tyr	Leu	Ser	Met	Asp	Ala	Gln	Arg	Trp	Glu	Glu	Val	Asp	Ile
		180						185					190		
Ser	Val	His	Cys	Asp	Val	His	Ile	Phe	Asn	Trp	Leu	Ile	Lys	Tyr	Ile
		195					200						205		
Lys	Arg	Asn	Thr	Lys	Glu	Asn	Lys	Asp	Cys	Glu	Met	Pro	Thr	Leu	Glu
	210						215						220		

Pro Gly Asn Val Ile Ser Ile Leu Ile Ser Ser Glu Phe Leu Lys Met
225 230 235 240
Asp Ser Leu Val Glu Gln Cys Ile Gln Tyr Cys His Lys Asn Met Asn
245 250 255
Ala Ile Val Ala Thr Pro Cys Asn Met Asn Cys Ile Asn Ala Asn Leu
260 265 270
Leu Thr Arg Ile Ala Asp Leu Phe Ser His Asn Glu Val Asp Asp Leu
275 280 285
Lys Asp Lys Lys Asp Lys Phe Lys Ser Lys Leu Phe Cys Lys Lys Ile
290 295 300
Glu Arg Leu Phe Asp Pro Glu Tyr Leu Asn Pro Asp Ser Arg Ser Asn
305 310 315 320
Ala Ala Thr Leu Tyr Arg Cys Cys Leu Cys Lys Lys Leu Leu Thr Lys
325 330 335
Glu Thr Glu Arg Arg Ile Pro Cys Ile Pro Gly Lys Ile Asn Val Asp
340 345 350
Arg Arg Gly Asn Ile Val Tyr Ile His Ile Arg Cys Arg Glu Asp Lys
355 360 365
Ile His Thr Cys Ile Phe Val Tyr Ile Tyr Ile
370 375

<210> 389

<211> 155

<212> PRT

<213> Homo sapiens

<400> 389

Met His Lys Tyr Ile Leu Ile Val Lys Asp Leu Asn Pro Thr Glu Pro

1	5	10	15												
Pro	Gln	Cys	Val	Gly	Ile	Phe	Pro	Pro	Leu	Ser	Pro	Ile	His	Ala	Ser
	20						25						30		
Leu	Leu	Tyr	Pro	Leu	Pro	Pro	Cys	Ser	Gly	Pro	Pro	Cys	Pro	Leu	Ser
	35						40					45			
Ser	Cys	Trp	Val	Cys	Cys	Trp	Glu	Ser	Ala	Gly	Asp	Arg	Lys	Asp	Arg
	50					55					60				
Gly	Glu	Arg	Gly	Gln	Gly	Thr	Asn	Phe	Pro	Ser	Pro	Pro	Leu	Gln	Ser
65				70						75				80	
His	Gly	Pro	Ala	Ala	Phe	Leu	Tyr	Gln	Arg	Phe	Gln	Leu	Leu	Pro	Gly
			85						90					95	
Gly	Val	Pro	Lys	Ser	Ser	Phe	Ser	Leu	Gly	His	His	Ala	Ser	Leu	Pro
	100							105				110			
Pro	Ser	Gln	Pro	Lys	Ala	Ser	His	Gly	Ala	His	Arg	Phe	Leu	Ser	Arg
	115						120				125				
Val	Leu	Ser	Ile	Met	Phe	Leu	Cys	Ile	Leu	Ser	Met	Leu	Tyr	Asn	Trp
	130					135					140				
Ser	Phe	Ile	Lys	Phe	Cys	Leu	Asn	Gly	Pro	Ile					
145					150				155						

<210> 390

<211> 421

<212> PRT

<213> Homo sapiens

<400> 390

Met Met Tyr Arg Thr Val Gly Phe Gly Thr Arg Ser Arg Asn Leu Lys

1

5

10

15

Pro Trp Met Ile Ala Val Leu Ile Val Leu Ser Leu Thr Val Val Ala
 20 25 30
 Val Thr Ile Gly Leu Leu Val His Phe Leu Val Phe Asp Gln Lys Lys
 35 40 45
 Glu Tyr Tyr His Gly Ser Phe Lys Ile Leu Asp Pro Gln Ile Asn Asn
 50 55 60
 Asn Phe Gly Gln Ser Asn Thr Tyr Gln Leu Lys Asp Leu Arg Glu Thr
 65 70 75 80
 Thr Glu Asn Leu Val Ser Gln Val Asp Glu Ile Phe Ile Asp Ser Ala
 85 90 95
 Trp Lys Lys Asn Tyr Ile Lys Asn Gln Val Val Arg Leu Thr Pro Glu
 100 105 110
 Glu Asp Gly Val Lys Val Asp Val Ile Met Val Phe Gln Phe Pro Ser
 115 120 125
 Thr Glu Gln Arg Ala Val Arg Glu Lys Lys Ile Gln Ser Ile Leu Asn
 130 135 140
 Gln Lys Ile Arg Asn Leu Arg Ala Leu Pro Ile Asn Ala Ser Ser Val
 145 150 155 160
 Gln Val Asn Ala Met Ser Ser Ser Thr Gly Glu Leu Thr Val Gln Ala
 165 170 175
 Ser Cys Gly Lys Arg Val Val Pro Leu Asn Val Asn Arg Ile Ala Ser
 180 185 190
 Gly Val Ile Ala Pro Lys Ala Ala Trp Pro Trp Gln Ala Ser Leu Gln
 195 200 205
 Tyr Asp Asn Ile His Gln Cys Gly Ala Thr Leu Ile Ser Asn Thr Trp
 210 215 220
 Leu Val Thr Ala Ala His Cys Phe Gln Lys Tyr Lys Asn Pro His Gln
 225 230 235 240
 Trp Thr Val Ser Phe Gly Thr Lys Ile Asn Pro Pro Leu Met Lys Arg

245 250 255
Asn Val Arg Arg Phe Ile Ile His Glu Lys Tyr Arg Ser Ala Ala Arg
260 265 270
Glu Tyr Asp Ile Ala Val Val Gln Val Ser Ser Arg Val Thr Phe Ser
275 280 285
Asp Asp Ile Arg Arg Ile Cys Leu Pro Glu Ala Ser Ala Ser Phe Gln
290 295 300
Pro Asn Leu Thr Val His Ile Thr Gly Phe Gly Ala Leu Tyr Tyr Gly
305 310 315 320
Gly Glu Ser Gln Asn Asp Leu Arg Glu Ala Arg Val Lys Ile Ile Ser
325 330 335
Asp Asp Val Cys Lys Gln Pro Gln Val Tyr Gly Asn Asp Ile Lys Pro
340 345 350
Gly Met Phe Cys Ala Gly Tyr Met Glu Gly Ile Tyr Asp Ala Cys Arg
355 360 365
Gly Asp Ser Gly Gly Pro Leu Val Thr Arg Asp Leu Lys Asp Thr Trp
370 375 380
Tyr Leu Ile Gly Ile Val Ser Trp Gly Asp Asn Cys Gly Gln Lys Asp
385 390 395 400
Lys Pro Gly Val Tyr Thr Gln Val Thr Tyr Tyr Arg Asn Trp Ile Ala
405 410 415
Ser Lys Thr Gly Ile
420

<210> 391

<211> 495

<212> PRT

<213> Homo sapiens

<400> 391

Met	Ala	Ala	Glu	Pro	Gln	Pro	Ser	Ser	Leu	Ser	Tyr	Arg	Thr	Thr	Gly
1				5					10					15	
Ser	Thr	Tyr	Leu	His	Pro	Leu	Ser	Glu	Leu	Leu	Gly	Ile	Pro	Leu	Asp
			20					25					30		
Gln	Val	Asn	Phe	Val	Val	Cys	Gln	Leu	Val	Ala	Leu	Phe	Ala	Ala	Phe
		35					40					45			
Trp	Phe	Arg	Ile	Tyr	Leu	Arg	Pro	Gly	Thr	Thr	Ser	Ser	Asp	Val	Arg
	50					55					60				
His	Ala	Val	Ala	Thr	Ile	Phe	Gly	Ile	Tyr	Phe	Val	Ile	Phe	Cys	Phe
65					70					75				80	
Gly	Trp	Tyr	Ser	Val	His	Leu	Phe	Val	Leu	Val	Leu	Met	Cys	Tyr	Ala
				85					90					95	
Ile	Met	Val	Thr	Ala	Ser	Val	Ser	Asn	Ile	His	Arg	Tyr	Ser	Phe	Phe
		100						105					110		
Val	Ala	Met	Gly	Tyr	Leu	Thr	Ile	Cys	His	Ile	Ser	Arg	Ile	Tyr	Ile
		115					120					125			
Phe	His	Tyr	Gly	Ile	Leu	Thr	Thr	Asp	Phe	Ser	Gly	Pro	Leu	Met	Ile
	130						135					140			
Val	Thr	Gln	Lys	Ile	Thr	Thr	Leu	Ala	Phe	Gln	Val	His	Asp	Gly	Leu
145					150					155				160	
Gly	Arg	Arg	Ala	Glu	Asp	Leu	Ser	Ala	Glu	Gln	His	Arg	Leu	Ala	Ile
			165						170				175		
Lys	Val	Lys	Pro	Ser	Phe	Leu	Glu	Tyr	Leu	Ser	Tyr	Leu	Leu	Asn	Phe
		180						185				190			
Met	Ser	Val	Ile	Ala	Gly	Pro	Cys	Asn	Asn	Phe	Lys	Asp	Tyr	Ile	Ala
		195					200					205			
Phe	Ile	Glu	Gly	Lys	His	Ile	His	Met	Lys	Leu	Leu	Glu	Val	Asn	Trp

210 215 220
Lys Arg Lys Gly Phe His Ser Leu Pro Glu Pro Ser Pro Thr Gly Ala
225 230 235 240
Val Ile His Lys Leu Gly Ile Thr Leu Val Ser Leu Leu Leu Phe Leu
245 250 255
Thr Leu Thr Lys Thr Phe Pro Val Thr Cys Leu Val Asp Asp Trp Phe
260 265 270
Val His Lys Ala Ser Phe Pro Ala Arg Leu Cys Tyr Leu Tyr Val Val
275 280 285
Met Gln Ala Ser Lys Pro Lys Tyr Tyr Phe Ala Trp Thr Leu Ala Asp
290 295 300
Ala Val Asn Asn Ala Ala Gly Phe Gly Phe Ser Gly Val Asp Lys Asn
305 310 315 320
Gly Asn Phe Cys Trp Asp Leu Leu Ser Asn Leu Asn Ile Trp Lys Ile
325 330 335
Glu Thr Ala Thr Ser Phe Lys Met Tyr Leu Glu Asn Trp Asn Ile Gln
340 345 350
Thr Ala Thr Trp Leu Lys Cys Val Cys Tyr Gln Arg Val Pro Trp Tyr
355 360 365
Pro Thr Val Leu Thr Phe Ile Leu Ser Ala Leu Trp His Gly Val Tyr
370 375 380
Pro Gly Tyr Tyr Phe Thr Phe Leu Thr Gly Ile Leu Val Thr Leu Ala
385 390 395 400
Ala Arg Ala Val Arg Asn Asn Tyr Arg His Tyr Phe Leu Ser Ser Arg
405 410 415
Ala Leu Lys Ala Val Tyr Asp Ala Gly Thr Trp Ala Val Thr Gln Leu
420 425 430
Ala Val Ser Tyr Thr Val Ala Pro Phe Val Met Leu Ala Val Glu Pro
435 440 445

Thr Ile Ser Leu Tyr Lys Ser Met Tyr Phe Tyr Leu His Ile Ile Ser
 450 455 460
 Leu Leu Ile Ile Leu Phe Leu Pro Met Lys Pro Gln Ala His Thr Gln
 465 470 475 480
 Arg Arg Pro Gln Thr Leu Asn Ser Ile Asn Lys Arg Lys Thr Asp
 485 490 495

<210> 392

<211> 953

<212> PRT

<213> Homo sapiens

<400> 392

Met Cys Asn Pro Glu Glu Ala Ala Leu Leu Arg Leu Glu Glu Val Phe
 1 5 10 15
 Ser Ala Thr Leu Ala His Val Asn Ser Leu Val Leu Gln Pro Leu Leu
 20 25 30
 Pro Ala Ala Pro Asp Pro Ser Asp Pro Trp Gly Arg Glu Cys Leu Arg
 35 40 45
 Leu Leu Gln Gln Leu His Lys Ser Ser Gln Gln Leu Trp Glu Val Thr
 50 55 60
 Glu Glu Ser Leu His Ser Leu Gln Glu Arg Leu Arg Tyr Pro Asp Ser
 65 70 75 80
 Thr Gly Leu Glu Ser Leu Leu Leu Leu Arg Gly Ala Asp Arg Val Leu
 85 90 95
 Gln Ala His Ile Glu Tyr Ile Glu Ser Tyr Thr Ser Cys Met Val Val
 100 105 110
 Gln Ala Phe Gln Lys Ala Ala Lys Arg Arg Ser Glu Tyr Trp Arg Gly

115 120 125
Gln Arg Lys Ala Leu Arg Gln Leu Leu Ser Gly Val Ser Ser Glu Gly
130 135 140
Ser Val Gly Ala Ser Leu Gly Gln Ala Leu His Gln Pro Leu Ala His
145 150 155 160
His Val Gln Gln Tyr Val Leu Leu Leu Leu Ser Pro Gly Asp Thr Ile
165 170 175
Gly Glu His His Pro Thr Arg Glu Leu Val Val Asn Ala Val Thr Leu
180 185 190
Phe Gly Asn Leu Gln Ser Phe Met Lys Gln Glu Leu Asp Gln Ala Val
195 200 205
Ala Thr Gln Ala Leu Trp His Thr Leu Arg Gly Arg Leu Arg Asp Val
210 215 220
Leu Cys Thr Pro Ala His Arg Leu Leu Gln Asp Ser Gln Asp Val Pro
225 230 235 240
Val Thr Val Ala Pro Leu Arg Ala Glu Arg Val Leu Leu Phe Asp Asp
245 250 255
Ala Leu Val Leu Leu Gln Gly His Asn Val His Thr Phe Asp Leu Lys
260 265 270
Leu Val Trp Val Asp Pro Gly Gln Asp Gly Cys Thr Phe His Leu Leu
275 280 285
Thr Pro Glu Glu Glu Phe Ser Phe Cys Ala Lys Asp Ser Gln Gly Gln
290 295 300
Ala Val Trp Gln Trp Lys Val Thr Trp Ala Val His Gln Ala Leu His
305 310 315 320
Gly Lys Lys Asp Phe Pro Val Leu Gly Ala Gly Leu Glu Pro Ser Gln
325 330 335
Pro Pro Asp Cys Arg Cys Ala Glu Tyr Thr Phe Gln Ala Glu Gly Arg
340 345 350

Leu Cys Gln Ala Thr Tyr Glu Gly Glu Trp Cys Arg Gly Arg Pro His
355 360 365
Gly Lys Gly Thr Leu Lys Trp Pro Asp Gly Arg Asn His Val Gly Asn
370 375 380
Phe Cys Gln Gly Leu Glu His Gly Phe Gly Ile Arg Leu Leu Pro Gln
385 390 395 400
Ala Ser Glu Asp Lys Phe Asp Cys Tyr Lys Cys His Trp Arg Glu Gly
405 410 415
Ser Met Cys Gly Tyr Gly Ile Cys Glu Tyr Ser Thr Asp Gly Val Tyr
420 425 430
Lys Gly Tyr Phe Gln Glu Gly Leu Arg His Gly Phe Gly Val Leu Glu
435 440 445
Ser Gly Pro Gln Ala Pro Gln Pro Phe Arg Tyr Thr Gly His Trp Glu
450 455 460
Arg Gly Gln Arg Ser Gly Tyr Gly Ile Glu Glu Asp Gly Asp Arg Gly
465 470 475 480
Glu Arg Tyr Ile Gly Met Trp Gln Ala Gly Gln Arg His Gly Pro Gly
485 490 495
Val Met Val Thr Gln Ala Gly Val Cys Tyr Gln Gly Thr Phe Gln Ala
500 505 510
Asp Lys Thr Val Gly Pro Gly Ile Leu Leu Ser Glu Asp Asp Ser Leu
515 520 525
Tyr Glu Gly Thr Phe Thr Arg Asp Leu Thr Leu Met Gly Lys Gly Lys
530 535 540
Val Thr Phe Pro Asn Gly Phe Thr Leu Glu Gly Ser Phe Gly Ser Gly
545 550 555 560
Ala Gly Arg Gly Leu His Thr Gln Gly Val Leu Asp Thr Ala Ala Leu
565 570 575
Pro Pro Asp Pro Ser Ser Thr Cys Lys Arg Gln Leu Gly Val Gly Ala

580 585 590
Phe Pro Val Glu Ser Arg Trp Gln Gly Val Tyr Ser Pro Phe Arg Asp
595 600 605
Phe Val Cys Ala Gly Cys Pro Arg Asp Leu Gln Glu Ala Leu Leu Gly
610 615 620
Phe Asp Val Gln Ser Ser Arg Glu Leu Arg Arg Ser Gln Asp Tyr Leu
625 630 635 640
Ser Cys Glu Arg Thr His Pro Glu Asp Ser Val Gly Ser Met Glu Asp
645 650 655
Ile Leu Glu Glu Leu Leu Gln His Arg Glu Pro Lys Ala Leu Gln Leu
660 665 670
Tyr Leu Arg Lys Ala Leu Ser Asn Ser Leu His Pro Leu Gly Lys Leu
675 680 685
Leu Arg Thr Leu Met Leu Thr Phe Gln Ala Thr Tyr Ala Gly Val Gly
690 695 700
Ala Asn Lys His Leu Gln Glu Leu Ala Gln Glu Glu Val Lys Gln His
705 710 715 720
Ala Gln Glu Leu Trp Ala Ala Tyr Arg Gly Leu Leu Arg Val Ala Leu
725 730 735
Glu Arg Lys Gly Gln Ala Leu Glu Glu Asp Glu Asp Thr Glu Thr Arg
740 745 750
Asp Leu Gln Val His Gly Leu Val Leu Pro Leu Met Leu Pro Ser Phe
755 760 765
Tyr Ser Glu Leu Phe Thr Leu Tyr Leu Leu Leu His Glu Arg Glu Asp
770 775 780
Ser Phe Tyr Ser Gln Gly Ile Ala Asn Leu Ser Leu Phe Pro Asp Thr
785 790 795 800
Gln Leu Leu Glu Phe Leu Asp Val Gln Lys His Leu Trp Pro Leu Lys
805 810 815

Asp Leu Thr Leu Thr Ser Asn Gln Arg Tyr Ser Leu Val Arg Asp Lys
 820 825 830
 Cys Phe Leu Ser Ala Thr Glu Cys Leu Gln Lys Ile Met Thr Thr Val
 835 840 845
 Asp Pro Arg Glu Lys Leu Glu Val Leu Glu Arg Thr Tyr Gly Glu Ile
 850 855 860
 Glu Gly Thr Val Ser Arg Val Leu Gly Arg Glu Tyr Lys Leu Pro Met
 865 870 875 880
 Asp Asp Leu Leu Pro Leu Leu Ile Tyr Val Val Ser His Ala Arg Ile
 885 890 895
 Gln His Leu Gly Ala Glu Ile His Leu Ile Arg Asp Met Met Asp Pro
 900 905 910
 Asn His Thr Gly Gly Leu Tyr Asp Phe Leu Leu Thr Ala Leu Glu Ser
 915 920 925
 Cys Tyr Glu His Ile Gln Lys Glu Asp Met Arg Leu His Arg Leu Pro
 930 935 940
 Gly His Trp His Ser Arg Glu Leu Trp
 945 950

<210> 393

<211> 331

<212> PRT

<213> Homo sapiens

<400> 393

Met Asn Val Lys Asn Val Gly Lys Leu Asn Gln Ser Ser Asp Leu Leu
 1 5 10 15
 Arg His His Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asn Lys

20	25	30
Cys Gly Glu Ser Phe Arg Ser Ser Ser Asp Leu Ile Lys His His Arg		
35	40	45
Val His Thr Gly Glu Lys Pro His Glu Cys Ser Glu Cys Gly Lys Val		
50	55	60
Phe Ser Gln Arg Ser His Leu Val Thr His Gln Lys Ile His Thr Gly		
65	70	75
Glu Lys Pro Tyr Gln Cys Thr Glu Cys Glu Lys Ala Phe Arg Arg Arg		
85	90	95
Ser Leu Leu Ile Gln Arg Arg Arg Ile His Ser Gly Glu Lys Pro Cys		
100	105	110
Glu Cys Lys Glu Cys Gly Lys Leu Phe Met Trp His Thr Ala Phe Leu		
115	120	125
Lys His Gln Arg Leu His Ala Gly Glu Lys Leu Glu Glu Cys Glu Lys		
130	135	140
Thr Phe Ser Lys Asp Glu Glu Leu Arg Gly Glu Gln Lys Ile His Gln		
145	150	155
Glu Glu Lys Ala Tyr Trp Cys Asn Gln Cys Gly Arg Ala Phe Gln Gly		
165	170	175
Ser Ser Asp Leu Ile Gly His Gln Val Thr His Thr Gly Glu Lys Pro		
180	185	190
Tyr Glu Cys Lys Glu Cys Gly Lys Thr Phe Asn Gln Ser Ser Asp Leu		
195	200	205
Leu Arg His His Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asn		
210	215	220
Lys Cys Gly Lys Ser Phe Arg Gly Ser Ser Asp Leu Ile Arg His His		
225	230	235
Arg Val His Thr Gly Glu Lys Pro Tyr Glu Cys Pro Glu Cys Trp Lys		
245	250	255

Ala Phe Ser Gln Asn Ser His Leu Val Ser His Gln Arg Ile His Thr
 260 265 270
 Arg Glu Lys Pro Phe Glu Cys Ser Asn Cys Gly Lys Ala Phe Ser Gly
 275 280 285
 Trp Thr Ala Phe Leu Lys His Gln Lys Leu His Ile Gly Lys Glu Phe
 290 295 300
 Glu Asp Cys Lys Ser Leu Gln Thr Gly Pro Ile Leu Ile Gly Ser Arg
 305 310 315 320
 Asn Leu Met Asn Ala Val Lys Leu Gly Lys Val
 325 330

<210> 394

<211> 1099

<212> PRT

<213> Homo sapiens

<400> 394

Met Ala His Leu Gly Pro Thr Pro Pro Pro His Ser Leu Asn Tyr Lys
 1 5 10 15
 Ser Glu Asp Arg Leu Ser Glu Gln Asp Trp Pro Ala Tyr Phe Lys Val
 20 25 30
 Pro Cys Cys Gly Val Asp Thr Ser Gln Ile Glu Ser Glu Glu Ala Glu
 35 40 45
 Val Asp Val Arg Glu Arg Glu Thr Gln Arg Asp Arg Glu Pro Lys Arg
 50 55 60
 Ala Arg Asp Leu Thr Leu Arg Asp Ser Cys Thr Asp Asn Ser Met Gln
 65 70 75 80
 Phe Gly Thr Arg Thr Thr Thr Ala Glu Pro Gly Phe Met Gly Thr Trp

	85	90	95
Gln Asn Ala Asp Thr Asn Leu Leu Phe Arg Met Ser Gln Gln Ala Ile			
100	105	110	
Arg Cys Thr Leu Val Asn Cys Thr Cys Glu Cys Phe Gln Pro Gly Lys			
115	120	125	
Ile Asn Leu Arg Thr Cys Asp Gln Cys Lys His Gly Trp Val Ala His			
130	135	140	
Ala Leu Asp Lys Leu Ser Thr Gln His Leu Tyr His Pro Thr Gln Val			
145	150	155	160
Glu Ile Val Gln Ser Asn Val Val Phe Asp Ile Ser Ser Leu Met Leu			
165	170	175	
Tyr Gly Thr Gln Ala Val Pro Val Arg Leu Lys Ile Leu Leu Asp Arg			
180	185	190	
Leu Phe Ser Val Leu Lys Gln Glu Glu Val Leu His Ile Leu His Gly			
195	200	205	
Leu Gly Trp Thr Leu Arg Asp Tyr Val Arg Gly Tyr Ile Leu Gln Asp			
210	215	220	
Ala Ala Gly Lys Val Leu Asp Arg Trp Ala Ile Met Ser Arg Glu Glu			
225	230	235	240
Glu Ile Ile Thr Leu Gln Gln Phe Leu Arg Phe Gly Glu Thr Lys Ser			
245	250	255	
Ile Val Glu Leu Met Ala Ile Gln Glu Lys Glu Gly Gln Ala Val Ala			
260	265	270	
Val Pro Ser Ser Lys Thr Asp Ser Asp Ile Arg Thr Phe Ile Glu Ser			
275	280	285	
Asn Asn Arg Thr Arg Ser Pro Ser Leu Leu Ala His Leu Glu Asn Ser			
290	295	300	
Asn Pro Ser Ser Ile His His Phe Glu Asn Ile Pro Asn Ser Leu Ala			
305	310	315	320

Phe Leu Leu Pro Phe Gln Tyr Ile Asn Pro Val Ser Ala Pro Leu Leu
325 330 335
Gly Leu Pro Pro Asn Gly Leu Leu Leu Glu Gln Pro Gly Leu Arg Leu
340 345 350
Arg Glu Pro Ser Leu Ser Thr Gln Asn Glu Tyr Asn Glu Ser Ser Glu
355 360 365
Ser Glu Val Ser Pro Thr Pro Tyr Lys Asn Asp Gln Thr Pro Asn Arg
370 375 380
Asn Ala Leu Thr Ser Ile Thr Asn Val Glu Pro Lys Thr Glu Pro Ala
385 390 395 400
Cys Val Ser Pro Ile Gln Asn Ser Ala Pro Val Ser Asp Leu Thr Lys
405 410 415
Thr Glu His Pro Lys Ser Ser Phe Arg Ile His Arg Met Arg Arg Met
420 425 430
Gly Ser Ala Ser Arg Lys Gly Arg Val Phe Cys Asn Ala Cys Gly Lys
435 440 445
Thr Phe Tyr Asp Lys Gly Thr Leu Lys Ile His Tyr Asn Ala Val His
450 455 460
Leu Lys Ile Lys His Arg Cys Thr Ile Glu Gly Cys Asn Met Val Phe
465 470 475 480
Ser Ser Leu Arg Ser Arg Asn Arg His Ser Ala Asn Pro Asn Pro Arg
485 490 495
Leu His Met Pro Met Leu Arg Asn Asn Arg Asp Lys Asp Leu Ile Arg
500 505 510
Ala Thr Ser Gly Ala Ala Thr Pro Val Ile Ala Ser Thr Lys Ser Asn
515 520 525
Leu Ala Leu Thr Ser Pro Gly Arg Pro Pro Met Gly Phe Thr Thr Pro
530 535 540
Pro Leu Asp Pro Val Leu Gln Asn Pro Leu Pro Ser Gln Leu Val Phe

545 550 555 560
 Ser Gly Leu Lys Thr Val Gln Pro Val Pro Pro Phe Tyr Arg Ser Leu
 565 570 575
 Leu Thr Pro Gly Glu Met Val Ser Pro Pro Thr Ser Leu Pro Thr Ser
 580 585 590
 Pro Ile Ile Pro Thr Ser Gly Thr Ile Glu Gln His Pro Pro Pro Pro
 595 600 605
 Ser Glu Pro Val Val Pro Ala Val Met Met Ala Thr His Glu Pro Ser
 610 615 620
 Ala Asp Leu Ala Pro Lys Lys Lys Pro Arg Lys Ser Ser Met Pro Val
 625 630 635 640
 Lys Ile Glu Lys Glu Ile Ile Asp Thr Ala Asp Glu Phe Asp Asp Glu
 645 650 655
 Asp Asp Asp Pro Asn Asp Gly Gly Ala Val Val Asn Asp Met Ser His
 660 665 670
 Asp Asn His Cys His Ser Gln Glu Glu Met Ser Pro Gly Met Ser Val
 675 680 685
 Lys Asp Phe Ser Lys His Asn Arg Thr Arg Cys Ile Ser Arg Thr Glu
 690 695 700
 Ile Arg Arg Ala Asp Ser Met Thr Ser Glu Asp Gln Glu Pro Glu Arg
 705 710 715 720
 Asp Tyr Glu Asn Glu Ser Glu Ser Ser Glu Pro Lys Leu Gly Glu Glu
 725 730 735
 Ser Met Glu Gly Asp Glu His Ile His Ser Glu Val Ser Glu Lys Val
 740 745 750
 Leu Met Asn Ser Glu Arg Pro Asp Glu Asn His Ser Glu Pro Ser His
 755 760 765
 Gln Asp Val Ile Lys Val Lys Glu Glu Phe Thr Asp Pro Thr Tyr Asp
 770 775 780

Met Phe Tyr Met Ser Gln Tyr Gly Leu Tyr Asn Gly Gly Gly Ala Ser
785 790 795 800
Met Ala Ala Leu His Glu Ser Phe Thr Ser Ser Leu Asn Tyr Gly Ser
805 810 815
Pro Gln Lys Phe Ser Pro Glu Gly Asp Leu Cys Ser Ser Pro Asp Pro
820 825 830
Lys Ile Cys Tyr Val Cys Lys Lys Ser Phe Lys Ser Ser Tyr Ser Val
835 840 845
Lys Leu His Tyr Arg Asn Val His Leu Lys Glu Met His Val Cys Thr
850 855 860
Val Ala Gly Cys Asn Ala Ala Phe Pro Ser Arg Arg Ser Arg Asp Arg
865 870 875 880
His Ser Ala Asn Ile Asn Leu His Arg Lys Leu Leu Thr Lys Glu Leu
885 890 895
Asp Asp Met Gly Leu Asp Ser Ser Gln Pro Ser Leu Ser Lys Asp Leu
900 905 910
Arg Asp Glu Phe Leu Val Lys Ile Tyr Gly Ala Gln His Pro Met Gly
915 920 925
Leu Asp Val Arg Glu Asp Ala Ser Ser Pro Ala Gly Thr Glu Asp Ser
930 935 940
His Leu Asn Gly Tyr Gly Arg Gly Met Ala Glu Asp Tyr Met Val Leu
945 950 955 960
Asp Leu Ser Thr Thr Ser Ser Leu Gln Ser Ser Ser Ser Ile His Ser
965 970 975
Ser Arg Glu Ser Asp Ala Gly Ser Asp Glu Gly Ile Leu Leu Asp Asp
980 985 990
Ile Asp Gly Ala Ser Asp Ser Gly Glu Ser Ala His Lys Ala Glu Ala
995 1000 1005
Pro Ala Leu Pro Gly Ser Leu Gly Ala Glu Val Ser Gly Ser Leu Met

1010 1015 1020
 Phe Ser Ser Leu Ser Gly Ser Asn Gly Gly Ile Met Cys Asn Ile Cys
 1025 1030 1035 1040
 His Lys Met Tyr Ser Asn Lys Gly Thr Leu Arg Val His Tyr Lys Thr
 1045 1050 1055
 Val His Leu Arg Glu Met His Lys Cys Lys Val Pro Gly Cys Asn Met
 1060 1065 1070
 Met Phe Ser Ser Val Arg Ser Arg Asn Arg His Ser Gln Asn Pro Asn
 1075 1080 1085
 Leu His Lys Asn Ile Pro Phe Thr Ser Val Asp
 1090 1095

<210> 395

<211> 247

<212> PRT

<213> Homo sapiens

<400> 395

Met Gly Gly Ala Gly Arg Gly Val Gly Glu Gly Arg Gly Arg Gly Gly
 1 5 10 15
 Gly Gly Arg Arg Trp Arg Ala Val Met Ala Ala Gly Asp Gly Asp Val
 20 25 30
 Lys Leu Gly Thr Leu Gly Ser Gly Ser Glu Ser Ser Asn Asp Gly Gly
 35 40 45
 Ser Glu Ser Pro Gly Asp Ala Gly Ala Ala Ala Glu Gly Gly Gly Trp
 50 55 60
 Ala Ala Ala Ala Leu Ala Leu Leu Thr Gly Gly Gly Glu Met Leu Leu
 65 70 75 80

Asn Val Ala Leu Val Ala Leu Val Leu Leu Gly Ala Tyr Arg Leu Trp
 85 90 95
 Val Arg Trp Gly Arg Arg Gly Leu Gly Ala Gly Ala Gly Ala Gly Glu
 100 105 110
 Glu Ser Pro Ala Thr Ser Leu Pro Arg Met Lys Lys Arg Asp Phe Ser
 115 120 125
 Leu Glu Gln Leu Arg Gln Tyr Asp Gly Ser Arg Asn Pro Arg Ile Leu
 130 135 140
 Leu Ala Val Asn Gly Lys Val Phe Asp Val Thr Lys Gly Ser Lys Phe
 145 150 155 160
 Tyr Gly Pro Ala Gly Pro Tyr Gly Ile Phe Ala Gly Arg Asp Ala Ser
 165 170 175
 Arg Gly Leu Ala Thr Phe Cys Leu Asp Lys Asp Ala Leu Arg Asp Glu
 180 185 190
 Tyr Asp Asp Leu Ser Asp Leu Asn Ala Val Gln Met Glu Ser Val Arg
 195 200 205
 Glu Trp Glu Met Gln Phe Lys Glu Lys Tyr Asp Tyr Val Gly Arg Leu
 210 215 220
 Leu Lys Pro Gly Glu Glu Pro Ser Glu Tyr Thr Asp Glu Glu Asp Thr
 225 230 235 240
 Lys Asp His Asn Lys Gln Asp
 245

<210> 396

<211> 705

<212> PRT

<213> Homo sapiens

<400> 396

Met	Lys	Gln	Glu	Leu	Asp	Gln	Ala	Val	Ala	Thr	Gln	Ala	Leu	Trp	His
1				5						10				15	
Thr	Leu	Arg	Gly	Arg	Leu	Arg	Asp	Val	Leu	Cys	Thr	Pro	Ala	His	Arg
			20					25						30	
Leu	Leu	Gln	Asp	Ser	Gln	Asp	Val	Pro	Val	Thr	Val	Ala	Pro	Leu	Arg
		35					40						45		
Ala	Glu	Arg	Val	Leu	Leu	Phe	Asp	Asp	Ala	Leu	Val	Leu	Leu	Gln	Gly
	50						55				60				
His	Asn	Val	His	Thr	Phe	Asp	Leu	Lys	Leu	Val	Trp	Val	Asp	Pro	Gly
	65					70					75			80	
Gln	Asp	Gly	Cys	Thr	Phe	His	Leu	Leu	Thr	Pro	Glu	Glu	Glu	Phe	Ser
				85						90				95	
Phe	Cys	Ala	Lys	Asp	Ser	Gln	Gly	Gln	Ala	Val	Trp	Gln	Trp	Lys	Val
		100						105						110	
Thr	Trp	Ala	Val	His	Gln	Ala	Leu	His	Gly	Lys	Lys	Asp	Phe	Pro	Val
	115						120					125			
Leu	Gly	Ala	Gly	Leu	Glu	Pro	Ser	Gln	Pro	Pro	Asp	Cys	Arg	Cys	Ala
	130						135					140			
Glu	Tyr	Thr	Phe	Gln	Ala	Glu	Gly	Arg	Leu	Cys	Gln	Ala	Thr	Tyr	Glu
	145					150				155				160	
Gly	Glu	Trp	Cys	Arg	Gly	Arg	Pro	His	Gly	Lys	Gly	Thr	Leu	Lys	Trp
			165						170					175	
Pro	Asp	Gly	Arg	Asn	His	Val	Gly	Asn	Phe	Cys	Gln	Gly	Leu	Glu	His
		180						185					190		
Gly	Phe	Gly	Ile	Arg	Leu	Leu	Pro	Gln	Ala	Ser	Glu	Asp	Lys	Phe	Asp
		195					200					205			
Cys	Tyr	Lys	Cys	His	Trp	Arg	Glu	Gly	Ser	Met	Cys	Gly	Tyr	Gly	Ile
	210					215					220				

Cys Glu Tyr Ser Thr Asp Glu Val Tyr Lys Gly Tyr Phe Gln Glu Gly
225 230 235 240
Leu Arg His Gly Phe Gly Val Leu Glu Ser Gly Pro Gln Ala Pro Gln
245 250 255
Pro Phe Arg Tyr Thr Gly His Trp Glu Arg Gly Gln Arg Ser Gly Tyr
260 265 270
Gly Ile Glu Glu Asp Gly Asp Arg Gly Glu Arg Tyr Ile Gly Met Trp
275 280 285
Gln Ala Gly Gln Arg His Gly Pro Gly Val Met Val Thr Gln Ala Gly
290 295 300
Val Cys Tyr Gln Gly Thr Phe Gln Ala Asp Lys Thr Val Gly Pro Gly
305 310 315 320
Ile Leu Leu Ser Glu Asp Asp Ser Leu Tyr Glu Gly Thr Phe Thr Arg
325 330 335
Asp Leu Thr Leu Met Gly Lys Gly Lys Val Thr Phe Pro Asn Gly Phe
340 345 350
Thr Leu Glu Gly Ser Phe Gly Ser Gly Ala Gly Arg Gly Leu His Thr
355 360 365
Gln Gly Val Leu Asp Thr Ala Ala Leu Pro Pro Asp Pro Ser Ser Thr
370 375 380
Cys Lys Arg Gln Leu Gly Val Gly Ala Phe Pro Val Glu Ser Arg Trp
385 390 395 400
Gln Gly Val Tyr Ser Pro Phe Arg Asp Phe Val Cys Ala Gly Cys Pro
405 410 415
Arg Asp Leu Gln Glu Ala Leu Leu Gly Phe Asp Val Gln Ser Ser Arg
420 425 430
Glu Leu Arg Arg Ser Gln Asp Tyr Leu Ser Cys Glu Arg Thr His Pro
435 440 445
Glu Asp Ser Val Gly Ser Met Glu Asp Ile Leu Glu Glu Leu Leu Gln

450 455 460
His Arg Glu Pro Lys Ala Leu Gln Leu Tyr Leu Arg Lys Ala Leu Ser
465 470 475 480
Asn Ser Leu His Pro Leu Gly Lys Leu Leu Arg Thr Leu Met Leu Thr
 485 490 495
Phe Gln Ala Thr Tyr Ala Gly Val Gly Ala Asn Lys His Leu Gln Gly
 500 505 510
Leu Ala Gln Glu Glu Val Lys Gln His Ala Gln Glu Leu Trp Ala Ala
 515 520 525
Tyr Arg Gly Leu Leu Arg Val Ala Leu Glu Arg Lys Gly Gln Ala Leu
 530 535 540
Glu Glu Asp Glu Asp Thr Glu Thr Arg Asp Leu Gln Val His Gly Leu
545 550 555 560
Val Leu Pro Leu Met Leu Pro Ser Phe Tyr Ser Glu Leu Phe Thr Leu
 565 570 575
Tyr Leu Leu Leu His Glu Arg Glu Asp Ser Phe Tyr Ser Gln Gly Ile
 580 585 590
Ala Asn Leu Ser Leu Phe Pro Asp Thr Gln Leu Leu Glu Phe Leu Asp
 595 600 605
Val Gln Lys His Leu Trp Pro Leu Lys Asp Leu Thr Leu Thr Ser Asn
 610 615 620
Gln Arg Tyr Ser Leu Val Arg Asp Lys Cys Phe Leu Ser Ala Thr Glu
625 630 635 640
Cys Leu Gln Lys Ile Met Thr Thr Val Asp Pro Arg Glu Lys Leu Glu
 645 650 655
Val Leu Glu Arg Thr Tyr Gly Glu Ile Glu Gly Thr Val Ser Arg Val
 660 665 670
Leu Gly Arg Glu Tyr Lys Arg Pro Trp Thr Thr Cys Cys His Phe Ser
 675 680 685

Ser Thr Trp Cys Arg Ala Pro Glu Phe Ser Thr Trp Glu Pro Arg Ser

690

695

700

Thr

705

<210> 397

<211> 907

<212> PRT

<213> Homo sapiens

<400> 397

Met Gln Tyr Gln Cys Lys Lys Cys Asn Val Val Phe Pro Arg Ile Phe

1

5

10

15

Asp Leu Ile Thr His Gln Lys Lys Gln Cys Tyr Lys Asp Glu Asp Asp

20

25

30

Asp Ala Gln Asp Glu Ser Gln Thr Glu Asp Ser Met Asp Ala Thr Asp

35

40

45

Gln Val Val Tyr Lys His Cys Thr Val Ser Gly Gln Thr Asp Ala Ala

50

55

60

Lys Asn Ala Ala Ala Pro Ala Ala Ser Ser Gly Ser Gly Thr Ser Thr

65

70

75

80

Pro Leu Ile Pro Ser Pro Lys Pro Glu Pro Glu Lys Thr Ser Pro Lys

85

90

95

Pro Glu Tyr Pro Ala Glu Lys Pro Lys Gln Ser Asp Pro Ser Pro Pro

100

105

110

Ser Gln Gly Thr Lys Pro Ala Leu Pro Leu Ala Ser Thr Ser Ser Asp

115

120

125

Pro Pro Gln Ala Ser Thr Ala Gln Pro Gln Pro Gln Pro Gln Pro Pro

130	135	140
Lys Gln Pro Gln Leu Ile Gly Arg Pro Pro Ser Ala Ser Gln Thr Pro		
145	150	155
Val Pro Ser Ser Pro Leu Gln Ile Ser Met Thr Ser Leu Gln Asn Ser		160
	165	170
Leu Pro Pro Gln Leu Leu Gln Tyr Gln Cys Asp Gln Cys Thr Val Ala		175
	180	185
Phe Pro Thr Leu Glu Leu Trp Gln Glu His Gln His Val His Phe Leu		190
	195	200
Ala Ala Gln Asn Gln Phe Leu His Ser Pro Phe Leu Glu Arg Pro Met		205
	210	215
Asp Met Pro Tyr Met Ile Phe Asp Pro Asn Asn Pro Leu Met Thr Gly		220
	225	230
Gln Leu Leu Gly Ser Ser Leu Thr Gln Met Pro Pro Gln Ala Ser Ser		235
	245	250
Ser His Thr Thr Ala Pro Thr Thr Val Ala Ala Ser Leu Lys Arg Lys		255
	260	265
Leu Asp Asp Lys Glu Asp Asn Asn Cys Ser Glu Lys Glu Gly Gly Asn		270
	275	280
Ser Gly Glu Asp Gln His Arg Asp Lys Arg Leu Arg Thr Thr Ile Thr		285
	290	295
Pro Glu Gln Leu Glu Ile Leu Tyr Glu Lys Tyr Leu Leu Asp Ser Asn		300
	305	310
Pro Thr Arg Lys Met Leu Asp His Ile Ala Arg Glu Val Gly Leu Lys		315
	325	330
Lys Arg Val Val Gln Val Trp Phe Gln Asn Thr Arg Ala Arg Glu Arg		335
	340	345
Lys Gly Gln Phe Arg Ala Val Gly Pro Ala Gln Ser His Lys Arg Cys		350
	355	360
		365

Pro Phe Cys Arg Ala Leu Phe Lys Ala Lys Ser Ala Leu Glu Ser His
370 375 380
Ile Arg Ser Arg His Trp Asn Glu Gly Lys Gln Ala Gly Tyr Ser Leu
385 390 395 400
Pro Pro Ser Pro Leu Ile Ser Thr Glu Asp Gly Gly Glu Ser Pro Gln
405 410 415
Lys Tyr Ile Tyr Phe Asp Tyr Pro Ser Leu Pro Leu Thr Lys Ile Asp
420 425 430
Leu Ser Ser Glu Asn Glu Leu Ala Ser Thr Val Ser Thr Pro Val Ser
435 440 445
Lys Thr Ala Glu Leu Ser Pro Lys Asn Leu Leu Ser Pro Ser Ser Phe
450 455 460
Lys Ala Glu Cys Ser Glu Asp Val Glu Asn Leu Asn Ala Pro Pro Ala
465 470 475 480
Glu Ala Gly Tyr Asp Gln Asn Lys Thr Asp Phe Asp Glu Thr Ser Ser
485 490 495
Ile Asn Thr Ala Ile Ser Asp Ala Thr Thr Gly Asp Glu Gly Asn Thr
500 505 510
Glu Met Glu Ser Thr Thr Gly Ser Ser Gly Asp Val Lys Pro Ala Leu
515 520 525
Ser Pro Lys Glu Pro Lys Thr Leu Asp Thr Leu Pro Lys Pro Ala Thr
530 535 540
Thr Pro Thr Thr Glu Val Cys Asp Asp Lys Phe Leu Phe Ser Leu Thr
545 550 555 560
Ser Pro Ser Ile His Phe Asn Asp Lys Asp Gly Asp His Asp Gln Ser
565 570 575
Phe Tyr Ile Thr Asp Asp Pro Asp Asp Asn Ala Asp Arg Gly Glu Thr
580 585 590
Ser Ser Ile Ala Asp Pro Ser Ser Pro Asn Pro Phe Gly Ser Ser Asn

595 600 605
Pro Phe Lys Ser Lys Ser Asn Asp Arg Pro Gly His Lys Arg Phe Arg
610 615 620
Thr Gln Met Ser Asn Leu Gln Leu Lys Val Leu Lys Ala Cys Phe Ser
625 630 635 640
Asp Tyr Arg Thr Pro Thr Met Gln Glu Cys Glu Met Leu Gly Asn Glu
645 650 655
Ile Gly Leu Pro Lys Arg Val Val Gln Val Trp Phe Gln Asn Ala Arg
660 665 670
Ala Lys Glu Lys Lys Phe Lys Ile Asn Ile Gly Lys Pro Phe Met Ile
675 680 685
Asn Gln Gly Gly Thr Glu Gly Thr Lys Pro Glu Cys Thr Leu Cys Gly
690 695 700
Val Lys Tyr Ser Ala Arg Leu Ser Ile Arg Asp His Ile Phe Ser Lys
705 710 715 720
Gln His Ile Ser Lys Val Arg Glu Thr Val Gly Ser Gln Leu Asp Arg
725 730 735
Glu Lys Asp Tyr Leu Ala Pro Thr Thr Val Arg Gln Leu Met Ala Gln
740 745 750
Gln Glu Leu Asp Arg Ile Lys Lys Ala Ser Asp Val Leu Gly Leu Thr
755 760 765
Val Gln Gln Pro Gly Met Met Asp Ser Ser Ser Leu His Gly Ile Ser
770 775 780
Leu Pro Thr Ala Tyr Pro Gly Leu Pro Gly Leu Pro Pro Val Leu Leu
785 790 795 800
Pro Gly Met Asn Gly Pro Ser Ser Leu Pro Gly Phe Pro Gln Asn Ser
805 810 815
Asn Thr Leu Thr Pro Pro Gly Ala Gly Met Leu Gly Phe Pro Thr Ser
820 825 830

Ala Thr Ser Ser Pro Ala Leu Ser Leu Ser Ser Ala Pro Thr Lys Pro

835

840

845

Leu Leu Gln Thr Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro

850

855

860

Ser Ser Ser Leu Ser Gly Gln Gln Thr Glu Gln Gln Asn Lys Glu Ser

865

870

875

880

Glu Lys Lys Gln Thr Lys Pro Asn Lys Val Lys Lys Ile Lys Glu Glu

885

890

895

Glu Leu Glu Ala Thr Lys Pro Glu Lys His Pro

900

905

<210> 398

<211> 412

<212> PRT

<213> Homo sapiens

<400> 398

Met Thr Phe Thr Phe Gln Ser Glu Asp Leu Lys Arg Asp Cys Gly Lys

1

5

10

15

Lys Met Ser His Gln His Val Phe Ser Leu Ala Met Glu Glu Asp Val

20

25

30

Lys Thr Ala Asp Thr Lys Lys Ala Ser Arg Ile Leu Asp His Glu Lys

35

40

45

Glu Asn Thr Arg Ser Ile Cys Leu Leu Glu Gln Lys Arg Lys Val Val

50

55

60

Ser Ser Asn Ile Asp Val Pro Pro Ala Arg Lys Ser Ser Glu Glu Leu

65

70

75

80

Asp Met Asp Lys Val Thr Ala Ala Met Val Leu Thr Ser Leu Ser Thr

	85		90		95
Ser Pro Leu Val Arg Ser Pro Pro Val Arg Pro Asn Glu Ser Leu Ser					
100		105		110	
Gly Ser Trp Lys Glu Gly Gly Cys Val Pro Ser Ser Thr Ser Ser Ser					
115		120		125	
Gly Tyr Trp Ser Trp Ser Ala Pro Ser Asp Gln Ser Asn Pro Ser Thr					
130		135		140	
Pro Ser Pro Pro Leu Ser Ala Asp Ser Phe Lys Pro Phe Arg Ser Pro					
145		150		155	160
Ala Gln Pro Asp Asp Gly Ile Asp Glu Ala Glu Ala Ser Asn Leu Leu					
165		170		175	
Phe Asp Glu Pro Ile Pro Arg Lys Arg Lys Asn Ser Met Lys Val Met					
180		185		190	
Phe Lys Cys Leu Trp Lys Asn Cys Gly Lys Val Leu Ser Thr Ala Ala					
195		200		205	
Gly Ile Gln Lys His Ile Arg Thr Ile His Leu Gly Arg Val Gly Asp					
210		215		220	
Ser Asp Tyr Ser Asp Gly Glu Glu Asp Phe Tyr Tyr Thr Glu Ile Lys					
225		230		235	240
Leu Asn Thr Asp Ser Val Ala Asp Gly Leu Ser Ser Leu Ala Pro Val					
245		250		255	
Ser Pro Ser Gln Ser Leu Ala Ser Pro Pro Thr Phe Pro Ile Pro Asp					
260		265		270	
Ser Ser Arg Thr Glu Thr Pro Cys Ala Lys Thr Glu Thr Lys Leu Met					
275		280		285	
Thr Pro Leu Ser Arg Ser Ala Pro Thr Thr Leu Tyr Leu Val His Thr					
290		295		300	
Asp His Ala Tyr Gln Ala Thr Pro Pro Val Thr Ile Pro Gly Ser Ala					
305		310		315	320

Lys	Phe	Thr	Pro	Asn	Gly	Ser	Ser	Phe	Ser	Ile	Ser	Trp	Gln	Ser	Pro	
				325			330				335					
Pro	Val	Thr	Phe	Thr	Gly	Ile	Pro	Val	Ser	Pro	Thr	His	His	Pro	Val	
				340			345				350					
Gly	Thr	Gly	Glu	Gln	Arg	Gln	His	Ala	His	Thr	Val	Leu	Ser	Ser	Pro	
				355			360				365					
Pro	Arg	Gly	Thr	Val	Ser	Leu	Arg	Lys	Pro	Arg	Gly	Glu	Gly	Lys	Lys	
				370			375				380					
Cys	Arg	Lys	Val	Tyr	Gly	Met	Glu	Asn	Arg	Asp	Met	Trp	Cys	Thr	Ala	
385							390			395				400		
Cys	Arg	Trp	Lys	Lys	Ala	Cys	Gln	Arg	Phe	Leu	Asp					
				405			410									

65	70	75	80
Lys Thr Asp Phe Lys Pro Thr Lys Ile Lys Arg Asp Lys Glu Gly His			
	85	90	95
Tyr Thr Met Val Lys Gly Ser Ile Gln Gln Glu Glu Leu Thr Ile Leu			
	100	105	110
Asn Ile Tyr Ala Pro Asn Thr Gly Ala Pro Arg Phe Ile Lys Gln Val			
	115	120	125
Leu Ser Asp Val Gln Arg Asp Leu Asp Ser His Thr Leu Ile Met Gly			
	130	135	140
Asp Phe Asn Thr Pro Leu Ser Thr Leu Asp Arg Ser Thr Arg Gln Lys			
145	150	155	160
Val Asn Lys His Thr Gln Glu Phe Asn Ser Ala Leu His Gln Ala Asp			
	165	170	175
Leu Ile Asp Ile Tyr Lys Thr Leu His Pro Lys Ser Thr Glu Tyr Thr			
	180	185	190
Phe Phe Ser Ala Pro His His Thr Tyr Ser Lys Ile Asp His Ile Phe			
	195	200	205
Gly Ser Lys Ala Leu Phe Ser Lys Cys Lys Arg Thr Glu Ile Ile Thr			
	210	215	220
Asn Cys Leu Ser Glu His Ser Ala Ile Lys Leu Glu Leu Arg Ile Lys			
225	230	235	240
Asn Leu Thr Gln Asn Arg Ser Thr Thr Trp Lys Leu Asn Asn Leu Leu			
	245	250	255
Leu Asn Asp Tyr Trp Val His Asn Glu Met Lys Ala Glu Ile Lys Met			
	260	265	270
Phe Phe Glu Thr Asn Glu Asn Lys Asp Thr Thr Tyr Gln Asn Leu Trp			
	275	280	285
Asp Ala Phe Lys Ala Val Cys Thr Gly Lys Phe Ile Ala Leu Asn Ala			
	290	295	300